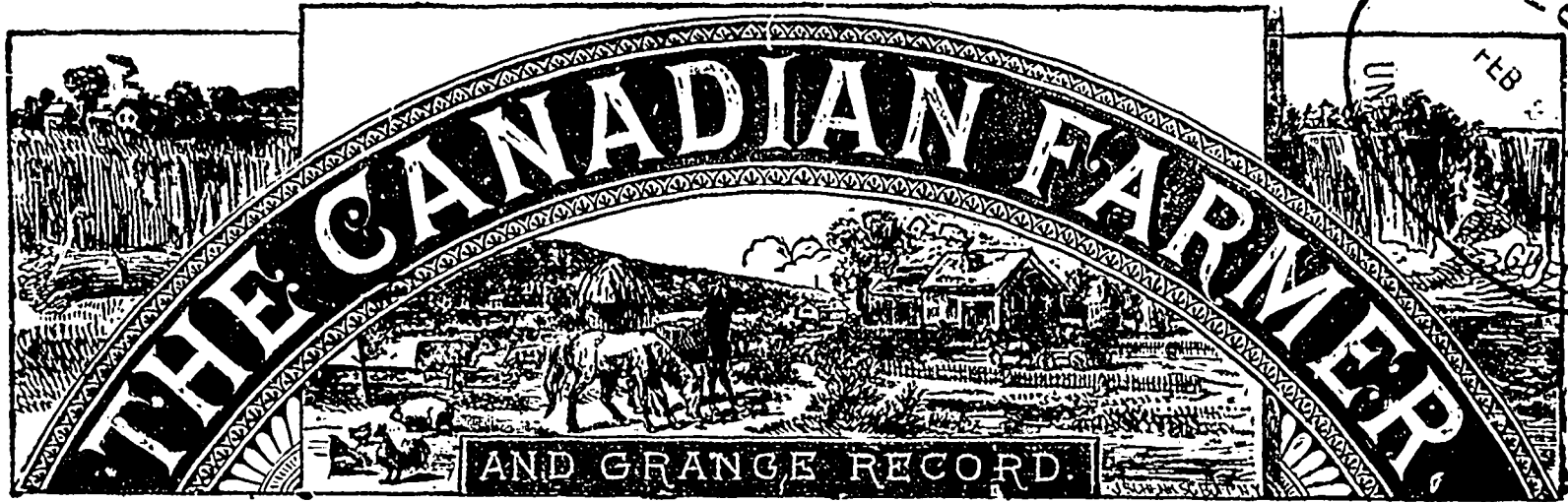


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AND ORGAN OF THE ONTARIO BEE-KEEPERS' ASSOCIATION.

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No. 42 | 302

WELLAND, ONT., WEDNESDAY, JUNE 25, 1884.

TERMS: ONE DOLLAR
Per Annum
IN ADVANCE

THE OUTS.

It is our intention shortly to present to our readers a series of articles prepared especially for our columns upon the manufacture of sugar from cane. On this page we give representations of some machinery, manufactured by M. Beatty & Sons, of Welland, who are the only Canadian manufacturers of the machinery in Canada. The Messrs. Beatty and Sons will be willing to give every information to those desiring it, and will gladly send them catalogues, etc., on application. Further representations of their machinery will follow, accompanied by the articles upon the subject.

HORTICULTURE IN COMMERCE.

The development of commercial horticulture in this country has mainly been in the last thirty years, though the trade in dried fruits has existed a much longer time. But thirty years ago the consumption of fresh fruits and vegetables was mainly confined to such products as were grown in the immediate vicinity of the market, and this was especially true of all the more perishable fruits and vegetables, which deteriorate quickly after being gathered. But rapid transit, cheap transportation and the refrigerator car have changed all these conditions, and the markets of the north are now supplied with fresh fruits and vegetables from the gulf states, before the frost has left the ground in their vicinity. As the season advances the source of supply steadily moves north, till passing the great cities on its course, the direction of the lines of supply is reversed and the products of more northern regions supply the later markets. Chicago gets its first supply of strawberries from Louisiana and Mississippi early in April, and its last from Northern Michigan and Wisconsin well on in July, giving a full three months strawberry season; and so of other fruits and vegetables. At the present time the markets of Chicago are supplied with the following list of fruits and vegetables all from localities farther south. Apples, (now) pears, peaches, plums, grapes, cherries, strawberries, raspberries, blackberries, watermelons, cabbage, cauliflowers, cucumbers, peas, string beans, new potatoes, turnips, beets, and various sundry other garden products. These come, not as years ago, in a few express packages and at prices which only permitted the rich to indulge in their use, but in whole trains and at prices which place them within the reach of the poor and laboring

classes. Instead of their consumption being confined to the great cities, they are distributed throughout the country from each commercial centre. Of the immense amounts received at Chicago, it is probable that fully half is now thus distributed, and the same is true of all the other com-

mercial centers. Such products have passed out of the category of luxuries, and are becoming regarded as necessary articles of diet by the people at large, especially of all cities and towns, and in this fact lies one great encouragement to the producer. No matter to what extent pro-

duction may be pushed the consumptive demand will keep pace with it. The introduction of the evaporator to supersede the sun or kitchen drying of fruits is an important element in commercial horticulture. It enables the producer, in times of surplus or low

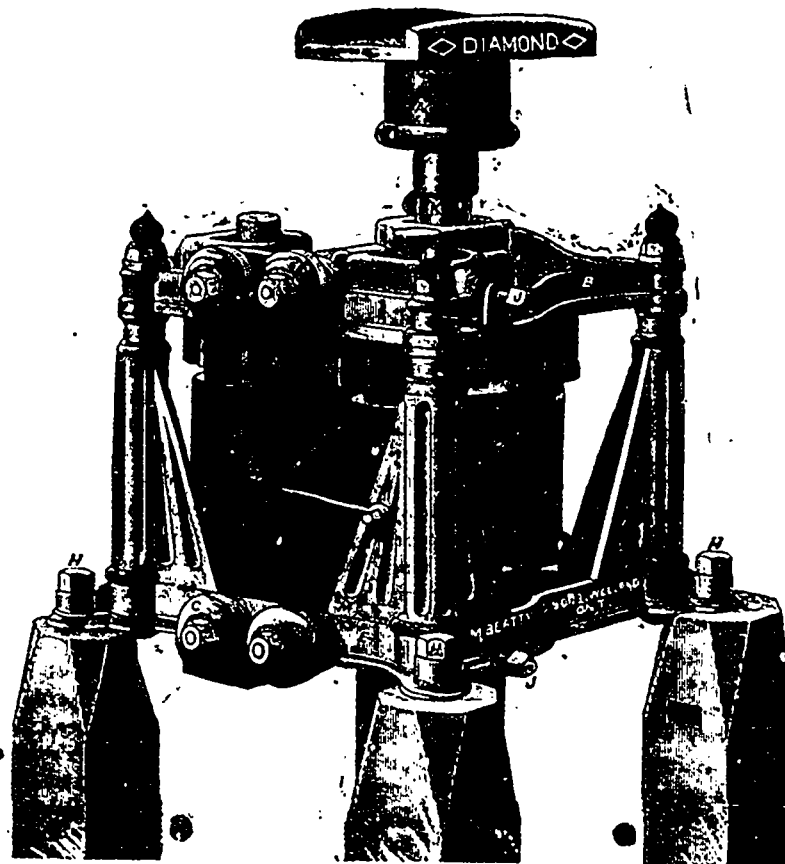
The development of the canning interest marks another very important era in commercial horticulture. As an important industry this only dates back to the discovery of gold in California, and the necessity that existed for supplying in some manner the thousands who rushed to the gold fields, with some articles of diet outside of the staples of bread, bacon, coffee and beans. The war gave an additional impulse to the business, and canned goods became an important part of every sutler's stores. Today these goods are staple stock in every city grocery and village or country store throughout the country, and embrace almost every vegetable or fruit product of the field, orchard or garden, from the most delicate fruits the plebeian pumpkin and the aesthetic Boston baked bean. As in case of fresh fruits and vegetables, the trade in and consumption of canned goods is steadily on the increase and will continue so. It is much to be regretted that no reliable data are obtainable showing the magnitude of the trade in horticultural products in this country. The census of 1880 gives the value of orchard products of the country in 1879 at \$50,876,154. The *American Grocer* is authority for the statement that the tomato pack of 1881 was 1,625,965 cases of 24 3-lb cans each, a total of 39,623,164 cans, or 117,789,492 lbs, equal to over two pounds per capita of the entire population of the country, and this for but a single product used in canning. It is safe, as we think, to assume that the value of horticultural products proper, excluding all the coarse vegetables known as field crops, does not fall short of one hundred millions of dollars per annum.

With the evaporator and cannery to use so large a portion of the product, to utilize all surplus and put them into comparatively imperishable form, and with the rapid increase in consumptive demand, there is little danger of over production by our practical horticulturists.—Ex.

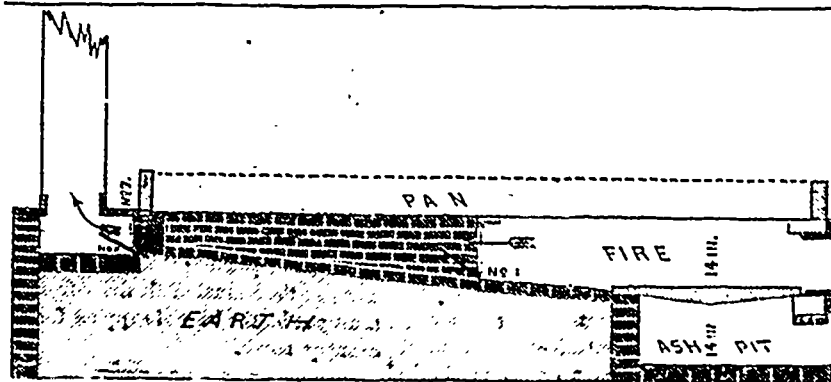
BLOOD CAKE FOR CATTLE.

The use of blood as a food for cattle has, it is stated, been the subject of experiment in Denmark by a chemist, who, as a result, has now invented and patented a new kind of cake, in which blood forms one of the chief ingredients. This new food is stated to be exceedingly nutritious and wholesome, and is eaten with avidity by all sorts of animals, and even by cows and horses, which have naturally a strong dislike to the smell of blood.

Theebaw, King of Burmah, has poisoned the Queen and her mother, and married the Queen's sister.



ONE OF M. BEATTY & SONS' SUGAR MILLS.



M. BEATTY & SONS' EVAPORATOR.

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STOCK.

THE TRAINING AND CHARACTER OF HORSES.

(Continued from last week.)

The manifestation proceeds from a condition of the brain just as mental phenomena in man arise, and this condition has been produced by erroneous treatment; and to secure the desired result of submission a method must be put in operation for the production of a different mental state; the fear of the animal must be checked and modified, and his confidence and good nature gained. In the meantime strong physical means of control are legitimate as a temporary expedient, so as to secure that mental state which will lead to success. If he has been unduly stimulated by fear, then the horse should be shown that there is no cause for fear; if through certain qualities of viciousness, then those qualities should be modified through measures which shall calm and soothe the



Fig. 6.—SLOW, DULL, OBTUSE.

brain excitement which produces them. Kindness will accomplish much even with a stubborn, wilful character like Fig. 3. We should always give a horse some credit for reason and allow him a little latitude as it were for reflection. Treating him much as a child whose disposition we understand, will have a similar effect.

The reader who is familiar with horses will recognize in the illustrations traits of horse physiognomy frequently met with. Fig. 1 shows the type of intelligence, high blood and docility; while Fig. 2 (from life) indicates the vicious and treacherous type, the animal that will tax the strength of his owner to keep in training. He is spirited, excitable, and "off the handle" often. Fig. 4 is a good fellow, docile, yet possessing spirit and intelligence—the horse for the family that will be kind to appreciative of him. Fig. 5 requires a gentle, but strong hand. A "high-strung," nervous fellow is he—needing no whip or spur, but will "go" while he can stand. Fig. 5 is a very sensitive animal; flies and mosquitos annoy him greatly; his skin is thin and his blood hot. In Fig. 6 we have a specimen of the heavy, dull, stupid horse; the one that "any one can drive," but is rarely driven off a walk, or a very sluggish infrequent "lopa." He's the horse to try the patience of a saint, when a little behind time for the train. Fig. 7 requires an exceptionally good driver to manage him; he must be watched or some dangerous trick of his may suddenly astonish his owner. He'll nab the unwary bystander on the shoulder, or perhaps seem disposed to make a brief luncheon of his hat. He has a wild looking eye, and the head-lock falls in an unsteady corkscrew way down over his forehead, in itself suggestive of untrustworthi-



Fig. 7.—VERY EXCITABLE AND INCORRIGIBLE. ness. Compare Figs. 1 or 4 with Figs. 2, 5, 6 and 7, and see how wide the differences of character shown even by engravings.

THE BEST FARM HORSES.

A prize essay by A. H. Sturdy.

If I were called upon to name the two requisites most necessary for a farmer to possess, in addition to a good farm, I should say a good wife and a good team; and when a young farmer becomes possessed of these he has made a good start on the road to success. While no industry of the farm pays better than raising good horses, none is more unprofitable than that of raising inferior ones. It costs but little more to raise a horse which, when six years old, will command a ready sale at \$400 or \$500, than one which can with difficulty be disposed of for \$100; or than it does to raise a heifer or a steer which, at maturity, is worth \$50 or \$75. The best team for the farmer is one which will best answer all the purposes of the farm; plowing, hauling, taking the farmer and his family to town, or his boys and their sweethearts for a lively sleigh-ride; and, in addition to all this, will give him a pair of colts every year, which will earn their keep from the time they are two years old until they are sold for \$800 or \$1,000 at five or six. The team to do this is a pair of handsome bay mares sixteen hands high, weighing 1,200 to 1,250 pounds each, with small, bony heads, large nostrils, broad foreheads; large, bright eyes; small, tapering eyes; long necks, nicely arched, deep as they spring from the shoulders and small at the throat-latch; long, oblique shoulder-blades; moderately high withers; short backs, and deep but not overbroad chests, because a horse with a very wide breast, although usually of good constitution and great strength, is seldom a graceful or rapid trotter; is apt to have a "padding" gait; and if used for road work will generally give out in the fore-legs from the extra strain put upon it by the weight of the broad chest. Our team must also have long, muscular thighs; large knee and other joints; short cannon (shin) bones; legs broad below the knees, and hocks with the sinews clearly defined; fetlocks free from long hair; long moderately oblique pasterns; rather small, though not contracted feet; broad loins; wide, smooth hips, and long, full tails. They must have plenty of nervous energy and good knee action; must be prompt, free drivers, capable of trotting a mile in four minutes; be fast walkers, and good, hearty eaters; must not "interfere," and must carry their heads well up without checks when on the road.

It will readily be seen that these mares are neither Clydesdales, Normans, Canadians, Arabians, thoroughbreds, nor trotters; but they are a team which will pull the plow through two acres of land in a day, will pull a ton, yes, two, if the roads are good, of produce to the village four miles in less than an hour, and trot back

with the empty wagon in half that time without distressing themselves or their driver. Should the farmer have a trip of twenty miles to make on business or pleasure, he can hitch them to his spring wagon, take his wife and children with him; and they need not be away from home more than three hours, or should he choose to go on horseback, he can mount one of the mares and enjoy a ride on a very fair saddle-horse. A team of Clydesdales may pull a heavier load at a dead drag; Canadians will stand more exposure and poorer fare; Arabians are better saddle-horses; thoroughbreds can outrun them; trotters, when hitched to a light buggy, can pass them on the road; but neither of these breeds combine anything like the desirable qualities for a farmer that the team which I have described possesses, and when it becomes desirable to dispose of their produce the colts of such mares will find a readier sale than those of any of the others, being exactly suited to the wants of the rich city gentleman for his family carriage, for which he must have a strong, handsome, showy team; and, as such teams are always scarce, he must pay a good price for them.

Large dray-horses usually bring remunerative prices; but few men will pay as much for a team to haul their bales of cotton or barrels of flour as they will for a team to draw their families on a pleasure tour.

TEXAS BEEF.

The great reservoir from which has been drawn the bulk of the cattle which are now becoming so abundant in all our Western Territories is the State of Texas. In 1870 one-seventh of the horned cattle in the United States was found within its borders, and it outnumbered the aggregate of those of all the other States and Territories west of the Missouri, California and the Pacific coast included. This ratio was slightly changed by the statistics of 1880, the State representing somewhat less than one-eighth of the whole number, while it still contained more than all the others mentioned above. From this source of supply has been drawn the great bulk of the range cattle now to be found on the public lands east of the Rocky Mountains—an industry which has grown to huge proportions, and yet dating back in these States and Territories a few years only. As an evidence of this we note that in 1870 the number given for Montana, Wyoming, and Colorado was a little less than 280,000. Ten years later Wyoming alone equaled this, while the three together aggregated nearly 800,000. We do not doubt that an accurate census taken to-day would more than double these figures.

To Texas, then, we must still look for the supply from which to draw recruits to further develop the capabilities of the northern ranges. Like the tide of immigration which is daily landing thousands of foreigners on the shores of the New World, more than equalling the relative birth increase, so the annual cattle-drive from Texas must yet be the base of supplies for all the country north.

WORMS IN HORSES.

Intestinal worms are parasites developing themselves in all domestic animals, each possessing its own varieties. Their presence in their digestive canal is first marked by an increased appetite, but the animal, no matter what food or how much he consumes, falls off; his skin is dry and hide-bound; his coat is rough, and is not shed

at the ordinary time. There is an annoying itching, causing the horse to rub his upper lip against the manger or on the wall. Sometimes there is considerable itching about the rectum indicated by the horse rubbing his tail or rump against anything within reach. The symptoms mentioned would lead one to suspect the existence of worms, but it is only when these appear among the dung that we can speak with certainty on this point, and especially when the worms have been developed in great numbers the symptoms are much aggravated, the horse becoming emaciated and suffering considerably from colicky pains; the flank is tucked up; the inside of the eyelids is pale; he walks unsteady, and a fatal termination sometimes ensues. A dose of aloes—four to six drachms—may be given to expel the worms. If this fails, divide 6 ounces of iron filings among 12 balls, and give one every morning until they are finished, then give a dose of aloes. This will expel any worms which remain in the intestine.

WARM WEATHER NOTES.

- Be kind.
- Improve.
- Don't overwork.
- Increase your stock.
- Milk at regular hours.
- Feed at regular hours.
- Tar your sheeps' noses.
- Be generous to dumb brutes.
- Give your pigs a clover-run.
- Give all stock pure cold water.
- Water horses frequently—cows too.
- Use sweat collars and prevent galling.
- Keep good calves and feed them well.
- Test cows and sell off unprofitable ones.
- Let animals in the field have some shade.
- Get rid of ticks among your sheep flock.
- Feed the calves regularly three times a day.
- Breed to the best horses—and the best bulls.
- Give animals a frequent change of pasture.
- Keep the stables scrupulously clean. It will pay.
- Have the hen house cleaned out and prevent lice.
- Salt the stock once a week, not necessarily on Sunday.
- Let working horses rest on Sabbath and after working hours.
- Keep your stable cool and thus make it comfortable for the horses.
- Bathe working horses' shoulders once a day with salt and cold water.
- When the corn gets tall and you are cultivating, muzzle the horse.
- Give your cows bran or other food. They will pay for it in extra milk.
- See that the sheep get water to drink. It is cruelty and loss to have them without it.
- Horses enjoy an evening's bath. If you have no river, lake or fresh stream near by give them a good washing from the cistern. Rub them dry afterwards.
- Protect your horses from bot-flies by making aprons of coarse cloth for their throats and breasts. These aprons can be attached to the bit-rings and collars respectively. They will save the horses any amount of worry and misery.

FAMILY CIRCLE.

ROSES AND THE NIGHTINGALE

In my garden it is night-time,
But a still time and a bright time,
For the moon rains down her splendor,
And my garden feels the wonder
Of the spell which it has under
In that light so soft and tender.

While the moon her watch is keeping
All the blossoms here are sleeping,
And the roses sigh for drowsing
Of the bees that love to love them
When the warm sun shines above them
And the butterflies pass gleaming.

Could one follow roses' fancies,
When the night the garden trauges,
Oh, what fair things we should chance on!
For to lilies and to roses,
As to us, soft sleep discloses
What the waking may not glance on.

But hark! now across the moonlight,
Through the warmness of the June night,
From the tall trees' listening branches
Comes the sound, sustained and holy,
Of the passionate melancholy,
Of a wound which singing stanches.

Oh, the ecstasy of sorrow
Which the music seems to borrow
From the thought of some past lover
Who loved vainly all his lifetime,
Till death ended peace and strife-time,
And the darkness clothed him over!

Oh, the passionate, sweet singing,
Aching, quivering, throbbing, ringing,
Dying in divine, soft closes,
Recommencing, waxing stronger,
Sweet notes, ever sweeter, longer,
Till the singing wakes the roses!

Quoth the roses to the singer:
"Oh, thou dearest music-bringer,
Now our sleep so sweetly endeth,
Toll us why thy song so sad seems,
When the air is full of glad dreams,
And the bright moon o'er us bendeth."

Sang the singer to the roses:
"Love for you my song discloses,
Hence the note of grief it borrows."
Quoth the roses, "Love means pleasure."
Quoth the singer, "Love's best measure
Is its pure attendant sorrows."

—Harpers Magazine.

SEASONABLE HINTS.

Thoroughly ventilate the whole house upon rising in the morning while the air is quite cool. Then close the blinds and doors for the day, leaving the rooms free from direct sunshine upon hot days, allowing air to enter through the closed blinds. Hang a thermometer in the sitting-room and one outside of the house. Settle all disputes on the question by comparing the elevation of the mercury in each thermometer. Heat is brought into the house by conduction through its roof and sides; also by convection—hot air entering by doors and windows, and by radiation—being reflected from skies, buildings and ground as well as directly radiated from the burning sun.

Light underwear is suitable in warm weather for one who is riding or sitting still, but much needless suffering may be averted by the removal, during the work in the fierce sunshine, of underclothing, and no danger is incurred if it be put on again before leaving the field of action. By far the largest part of the heat of the body is caused by the oxygen breathed. The heat thus formed in a man at rest would raise the temperature of two tons of ice-water two degrees. The remaining one-fifth of the heat of the body is produced from the food. The body heat is nearly all lost by radiation and conduction (three-fourths) and by evaporation of sweat (one-seventh), while through breathing about one-tenth is lost, and by eating and drinking cold solids and fluids only about one-fiftieth of the heat of the body is removed. During labor half as much again of heat is formed as during rest.

During sleep half as much is produced as during waking hours.

To avoid becoming overheated allow the radiation and conduction of heat from the body by suitable clothing—subject to changing at any hour. Maintain more or less quiet; keep the skin active. Hot water taken into the stomach causes sweating, but cold water does not always produce this result. The cooling effect of a cold drink is very trifling. When hot and thirsty, pour a dipperful of cold water, in a small stream, upon the wrist, then a very moderate drink will be sufficient. Hard work during exposure to the fierce rays of the sun in hot weather actually raises the temperature of the body and interferes with the proper action of the heart and lungs, and endangers the brain and spinal cord. Hard work during exposure to great heat is very apt to hinder or to entirely arrest digestion. In addition to this fact, it is often the case that the stomach is filled with immature fruits and vegetables, which, while greatly relished, can withstand the action of the digestive forces of the abdomen. Two baths daily in lukewarm water—or cold water, if one is robust—are of immense importance during the summer months. The night air should find access to every sleeping apartment through open windows. An hour's sleep after dinner is very desirable for hard workers. The cook is usually one of this class. Happy is she if she has a shady room without a stove within to knead, mix and mould articles for baking, and to iron and wash, and thrice blessed is she who has a brick oven under a shady tree, and a man to heat it for her. Give the babies water to drink when well, and especially when they are sick.

During hot weather the ability to work and to digest food is diminished, and both work and food should be regulated accordingly. And where the decomposition of animal and vegetable substances is so great and rapid, great effort should be made to keep the air one breathes pure. Cleanse the cellars, let air and sunshine into them. Free and purify every underground or surface drain, wash the cistern walls, and remove all sediment from the wells. The effect of intense heat upon the eyes is to produce conjunctivitis, retinitis, blepharitis, iritis and neuro-retinitis.

GIRL'S LETTERS.

Who nowadays writes letters? We all dash off hasty notes, or hurriedly scribble a postal-card, under pressure of immediate necessity, but the "epistolary art," so dear to our grandmothers, is becoming extinct.

It was not long ago that postage was so high that letters were a luxury, rather than the necessity that they are now. The arrival of one was looked upon as a great event, and to destroy it was little short of a sacrilege. It was worth while to spend some time and pains on a letter which would be read and re-read, and perhaps handed down for the benefit of posterity.

The disjointed productions that pass for letters in these degenerate modern days would have shocked an educated girl of the last century. There is no reason that girls who can speak French and German should not be able to write English. Many young ladies who have had a smattering of recondite science, and have dipped into the grammars of one or more of the ancient and half a dozen of the modern languages, are still unable to write a letter in their own tongue, that in arrangement and choice of words might not disgrace a

properly taught child of twelve. Especially, the distinction between the third and first person is often so hazy that a formal note begun in one is finished in the other!

A good correspondent begins her letter by writing her address and the full date plainly at the top of the page. Letters are so often referred to as evidence in trifling or important matters that is worth remembering. If they should happen to be kept for any length of time, the date would add materially to their interest.

Many persons seem to think it is an insult to the intelligence of their friends to write straight-forward from page to page in the natural manner, and that the more their letters resemble a puzzle the more piquantly interesting they will be. It is hard to tell why a sentence commenced at the bottom of one page should not be continued at the top of the next, instead of rushing wildly off at a tangent, and be found at last written crosswise, in the very last place a person would look for it.

The girl who really answers a letter is no common correspondent. We have all groaned with mild exasperation over a letter supposed to be a reply to one of our own, but which took not the smallest notice of our modest communication, even in a cursory mention of its arrival, left all our questions unanswered, and, with curious ingenuity, omitted every scrap of information on the subjects that most interested us.

The best time to answer a letter, when it is possible, is immediately after first reading it. So many things rush into one's mind that cannot be recalled afterward. Very few people have the leisure to do this, as, in ordinary cases, it involves a rather brisk correspondence; but it should not be put off longer than necessary.

In keeping up a regular correspondence with friends at a distance, it is a good plan to jot down at night little pieces of news or anything of interest that has occurred during the day. This journal can be used in writing the letter; nothing will be forgotten, and there will be less danger of repetition.

People who are travelling abroad are very much apt to make their home letters too much like guide-books. Description of scenery and famous places are generally tedious. It is the little things that are entertaining; a droll adventure, a peculiarity in dress or speech, anything which especially strikes the writer, will be certain to be given vividly, and will add color and interest to her letter.

The full name should the letter miscarry, it may be returned through the Dead-Letter Office, which would be impossible if the only clue were "Lulu" or "Katie."

RULES FOR THE BOYS—AND THE GIRLS TOO.

The following contains a whole book on conduct for the boy and girl readers of the FARMER:

Don't neglect personal cleanliness—which is more neglected than careless observers suppose.

Don't wear soiled linen. Be scrupulously particular on this point.

Don't be untidy in anything. Neatness is one of the most important of the minor morals.

Don't neglect the details of the toilet. Many persons, neat in other particulars, carry blackened finger nails. This is disgusting.

Don't cleanse your ears, or your nose, or trim your finger-nails in public.

Don't use hair dye. The color is not like nature, and deceives no one.

Don't use hair oil or pomades. This habit was once quite general, but it is now considered vulgar, and it is certainly not cleanly.

Don't wear apparel with decided colors or with pronounced patterns. Don't—we address here the male reader—wear anything that is pretty. What have men to do with pretty things? Select quiet colors and unobtrusive patterns.

Don't wear fancy-colored shirts, or embroidered shirt-fronts.

Don't wear your hat cocked over your eye or thrust back upon your head. One method is rowdyish, the other rustic.

Don't go with your boots unpolished; but don't have the polishing done in the public highways.

Don't be a "swell" or a "dude," or whatever a fop of the period may be called.

Don't walk with a slouching, slovenly gait. Walk erectly and firmly, not stiffly; walk with ease but still with dignity.

Don't carry your hands in your pockets. Don't thrust your thumbs into the arm-holes of your waistcoat.

Don't chew or nurse your toothpick in public—or anywhere else.

Don't chew tobacco. It is a bad and ungentlemanly habit.

Don't whistle in the street, in public vehicles, at public assemblies, or anywhere it may annoy.

Don't laugh boisterously. Laugh heartily when occasion calls for it, but the loud guffaw is not necessary to heartiness.

Don't bolt, without notice, into any one's private apartment. Respect always the privacy of your friends, however intimate you may be with them.

Don't wear your hat in a strictly private office. This is no more justifiable than wearing a hat in a drawing-room.

Don't pick up letters, accounts, or anything of a private character that is lying on another's desk.

Don't look over a person's shoulder when he is reading or writing.

NOTES ON THE FASHIONS.

Shepherd plaid is very popular.

Pinking is much used for flounces.

New leather belts are made in the ladder style.

Ropes of pearl and other beads are sold for hat trimmings.

New lace parasol covers are made in the accordion style.

Handkerchiefs are in check-board designs, in different colors.

New wall pockets are of matting, with painted sprays of flowers.

Patent-leather vamps with kid tops are the fashion for ladies' shoes.

The dye of black stockings and crape veils is poisonous to many people.

Orange, ochre and terra-cotta are the colors most in demand in silk stocking.

The narrow strips of Turkish embroidery make the prettiest mantel lambrequins.

Many plain white lawns have the flounces, yoke and blocks on basque hemstitched.

Some handsome chairs are made entirely of brass, with plush cushions tied on them.

The ugliest new bonnet pin appears to the ordinary eye to be a pair of scissors.



APRIL.

OFFICERS OF THE ONTARIO BEE-KEEPERS' ASSOCIATION.

President, Mr. S. Cornell, Lindsay; 1st Vice-President, J. B. Hall, Woodstock; 2nd Vice-President, Dr. Thom. Stroutville; Secretary Treasurer, Mr. Jacob Spence, Toronto.

Executive Committee—M. Bamer, Cedar Grove, D. Chalmers, Musgoilburg, C. Mitchell, Listowell, B. Davidson, Uxbridge, W. E. Wells, Phillipstown.

Communications on the business of the association, and beekeepers' department of the CANADIAN FARMER to be addressed to the Secretary-Treasurer, 21 Parliament St., Toronto.

EXTRACTING AND CURING HONEY

During the past thirteen years we have extracted honey largely each season, taking as much as sixteen tons in a single season.

We have operated under almost every variety of conditions.

During this time we have noticed the many inquiries, which have been made through our journals, bearing upon the subject of extracting honey. It is a growing interest, second to none in our pursuit.

One of the most important points in this connection, is the best time to extract. Indeed to those who extract largely, it is a question all important. Let us notice some of the advantages of the different methods.

We shall claim, first, that as regards the quality of honey, there is no difference as to the time when it is extracted. It may be cured equally well after as before. The only necessity is that it be cured.

The advantages of extracting honey as soon as it is gathered are these. When it is being gathered rapidly, if it is extracted at once, room is offered for the queen to deposit her eggs, and the operation seems to stimulate brooding. The large force of bees thus secured is of great importance in sections where the seasons are long, or where full honey is abundant.

When extracted as soon as gathered the bees are saved the labor of curing the honey and of capping the cells, and the operator is saved the labor of uncapping the cells but the great advantage in removing it from the combs as fast as filled, so that the bees may be fully occupied in bringing in honey while the yield continues. To us who are in sections where the flow of honey is of limited duration this is of extreme importance.

When the honey is first gathered, it is much more easily thrown from the combs, and it is much more agreeable to operate when the bees are busily at work.

The bearing this subject of properly evaporated honey has upon holding honey from one season to another, is worth our attention.

A thorough investigation of this subject by bee keepers generally, will prove to be one of extreme importance.—*Bee Magazine.*

NOTES ON BEE CULTURE.

May again with its bud and bloom, and to the bee keeper, the pleasant hum of his honey gatherers has arrived. April was a cold, chilly, muggy month, so that at this date, though there is some sealed drone brood and perhaps a few drones in the hives, there is scarcely more brood than there was in the last of March. Bloom is in profusion on

fruit trees, and the first white clover heads are to be seen, but nectar seems to be scarce, for one can hardly open hives without attracting robbers. This must soon change and the prospect is flattering.

I was surprised to find not a single queen missing in so many stocks, and since the bees were set out, No. 5 lost a queen, received from A. G. Hill, last year, and which promised, when set on summer stand, this spring, to be unusually prolific. This thing has occurred, in a few cases, every spring, and I am at a loss to account for it, the losses are, almost invariably, just where you would least expect them.

Crowded with work and inconveniently situated I did not give my bees the close attention usually bestowed upon them in the early spring, so that some of the bees that died in the cells were not removed as soon as they should have been, and consequently the bees have tried to get rid of them by cutting the cells away, but now if a single dead bee is in a comb the queen has, without a single exception refused to lay in that comb. After trying various ways I have to depend mostly upon a darning or crochet needle, to remove these dead bees. Pass the needle through the side of the next cell, and slip the bee out. Where combs are not in use most of them can be jarred out, after they have dried and shrunken some, by turning the comb on one side and tapping the top bar upon something; but this often fails, and if one gets a little too earnest, in tapping, a nice new comb is broken sometimes.

But what it was most desired to call attention to, in speaking of these dead bees in combs, was, that this was overlooked by Messrs. Hill and Doolittle, in their discussion of box and moveable frame hives. It is not a matter of any importance to a box hive man, as he knows nothing of it, and "where ignorance is bliss it is folly to be wise," but to any one who has specially noticed the labor and delay put upon a colony by the presence of its dead members in the cells, it is an argument in favor of frames that cannot be offset. We may pipe a queen out of the hive but you can't get dead bees out of the cells unless you first lift the combs out of the hives.

I have been anxiously watching for the germination of the seeds of several varieties of scrophularia, sent me by Dr. Tinker, but as yet have seen nothing green. Seeds of the Golden Honey Plant, self-sown last year are coming thickly. Figwort sown four years ago shows a few fine plants, but self-sown seed, from plants that were cultivated with early corn, last season almost cover the ground with green.

Nature has a purpose in everything she does, and the fact that figwort secretes nectar continuously, while in bloom proves the need of the constant presence of insects to fertilize its seeds hence this plant, growing where it has the full benefit of the sun, and thousands of bees, it has had a far greater number of seeds germinate than if it had grown in the shade, or away from the hives. My efforts to propagate catnip have not been as I could wish. The old roots die after ripening much seed, and the young plants seem to choke each other out for a year or two. Still considerable quantities will come up in unlooked for places.

This is May with its cyclones and tornadoes, and many of my neighbors are in their storm-pits and cellars, as I write for the deep boom of the thunder shakes windows and doors, while the air smells close and oppressive.—*B. K. Guide.*

Holloway's Corn Cure destroys all kinds of corns and warts, root and branch.

ABOUT BEE-MOTHS.

BY MRS. G. HARRISON, PERDUE COUNTY, ILL.

A farmer who keeps a few bees, asked me if my bees are troubled with moth-worms. He said that he saw bees swarm out on account of them, and he split open the gum and found a peck of worms. It is well to be reminded of the existence of these enemies once and a while, lest we forget they exist.

Comb is valuable, for while the bees are building a pound of it, they could gather twenty pounds of honey, and it ought not to be uncared for in hives where the bees have died, to be consumed by the larvae of the bee-moth. These larvae are great cowards and when the combs are lifted out of the hive, poke out their heads and may be destroyed surely and quickly by exposing them to the fumes of burning sulphur.

The moth is of the color of old wood, and the wings cross one another, turning up like the tail of a fowl. It may be seen lurking around hives in the evening, trying to gain admittance. Where fowls have the run of an apiary they catch many of these moths on the wing. Persons speak of moths running out bees! It would be as proper to say that weeds run out corn. If from any cause, such as queenlessness, a colony becomes extinct, or nearly so, the moth enters and takes possession, and it is a mistaken idea to attribute the destruction of the bees to the moths.

Comb, in frames, can be kept over the summer free from the depredations of the larvae of the bee-moth if they are suspended in the light and air, and are three or four feet apart. Moths love darkness and uncleanness, and deposit their eggs in cracks and crevices about hives, where bees cannot gain access to them. Do not permit refuse comb to lie around the apiary or bee-house. I have put frames of comb containing their larvae into a hive of Italian bees, and in half an hour could see the bees bringing them out. There is no need of any other moth-trap, for they are always baited and set. A handful of Italians will defend a hive.

THAT PRIZE LIST.

The apiary product prize list, published in our issue of a couple of weeks ago, should have been headed, "Industrial Exhibition Toronto—The Apiary Prize List." The error was simply an omission of those lines, and parties who intend exhibiting at the exhibition, will get fullest information from the manager and secretary, H. J. Hill, Jacob Spence, Esq. Our bee editor at Toronto will render all the assistance to intending exhibitors he possibly can.

BEE NOTES FOR JULY.

MAKING HONEY VINEGAR.—The "cappings" shaved off in the preparation of honey for extracting, are always allowed to drain. But even when thoroughly drained, considerable honey still adheres to them, and it is an excellent plan to have a keg or a barrel of water in which to wash them, and to allow the water to ferment and become vinegar. Water which has been used to rinse out any utensil that has contained honey, can be thrown into the barrel. The scum that arises upon the surface of the sweetened water should be skimmed off.

MAKING BEESWAX.—The "cappings" which accumulate in the extraction of honey, and all odds and ends of comb, should be carefully saved, but in warm weather it is well to render them into wax

as soon as possible; otherwise they are liable to become infested with the bee moth's larva. What is called a Swiss wax extractor is a convenient utensil for rendering wax. It is simply a "basket" of perforated zinc, inside a "steamer" which is set over a kettle of boiling water. The refuse comb is placed in the basket, and the steam rises and melts the wax, which is caught by a false bottom in the steamer, and runs out through a spout in the side. When there is not much wax to render, the cappings of combs can be put into a tin sieve, the sieve covered, and then set over a pan of boiling water. The steam will melt the wax, which will run down and rest upon the water in the pan. The pan and its contents can be set aside until cold, when the wax will be found formed into a cake. Another method is to put the combs into a cloth sack, and the latter into a wash-boiler—the sack being held at the bottom of the boiler by means of a stick, the upper end of which presses against another stick, lying across the top of the boiler, and tied to its handles. When the wax is melted, the boiler is set aside until the wax is cool enough to be removed. Wax can be cleaned from utensils, by using a cloth saturated with kerosene oil.

FUEL FOR SMOKERS.—Many substances have been recommended as fuel for smokers, but nothing has given the writer more satisfaction than what is sometimes called "punk," a peculiar kind of dry rot. That from the maple tree is best.

ANTS.—To circumvent the little ants that sometimes prove themselves such nuisances by getting into honey, place it upon a table or platform, the supports of which rest in dishes partly filled with kerosene oil. A muslin cover with a rubber cord in a hem around its edge, will exclude dust and insects from a vessel holding honey.

A BEE STING REMEDY.—Veteran beekeepers rarely trouble themselves with bee sting remedies, but amateurs, and those in whom the flesh swells when stung near the eyes, often wish for something that will reduce the swelling and pain. The best remedy known to the writer is a tincture of Plantain, made by pouring alcohol over the freshly gathered leaves, and allowing it to remain until it turns black, when it is poured off and bottled. If this remedy is applied immediately after the wound is given, the swelling and pain will be scarcely perceptible. If the person is severely stung a few drops of the tincture can be taken internally.—*W. Z. HUTCHINSON in American Agriculturist.*

EARLY SWARMS AND FIRST COMB HONEY FOR 1884.

EDITOR, CANADIAN FARMER.—Our first swarm came off May 23rd, two days before apple blossoms opened in this vicinity, and our bees have continued swarming on almost every favorable day since then. We took our first finished sections off today (June 9th), we got ten pounds from one colony and they have considerably more partly capped; the sections we took off were well filled and a light color; they were put in the hive May 17th and only had "comb foundation starters" in them. **GRAINGER & DUKE, Deer Park, Toronto.**

An exchange speaks of a "fatal murder." The fiend who would commit a fatal murder would do worse. He would kill a man dead.

FARM and GARDEN.

THE BEAN AS A FIELD CROP.

While every farmer plants a few beans in his garden, but few grow enough to furnish more than is wanted for home use, the bean is a product that always finds a ready market at good prices. Those who have high land, with loomy soil can easily raise an acre or two of field beans that would bring profitable returns, providing care be taken in the selection of seed. It is not safe to go into the open market and buy seed, for if they come from the South they will fail to produce a crop that will ripen even, and are more likely to run to vine. Eastern beans are better, but he who raises field beans should never trust to the open market for seed, but should buy what he has every assurance is good. The best way is to raise them, being careful to start with the best that can be found, and to make every effort to improve them. Selections should be made from those plants that produce the largest quantities of good beans that ripen very nearly at the same time.

It is a great objection to a variety if it continues to blossom until the frost comes; it being impossible, without great labor, to separate the green from the ripe beans. It very much injures the quality of beans to have green ones among them, and reduces their market value, but a variety that blooms full, covering all parts of the plant nearly at the same time, and then stops sending out any more buds, will mature its seeds all at one time, which is what is wanted for a market bean. When they ripen in this way they can be gathered earlier and are in a condition to be put on the market at once.

The first new beans in the market, if good, will as a rule bring in an extra price. It is very easy to get a good variety by selection, and when once obtained, very easy to keep. The medium sized pea bean is one of the most profitable varieties for most markets. It produces more to the acre than the small size, and is, as a rule, more uniform in size. It always commands a ready sale, and if put on the market early in the autumn, as it can be, it will command twenty-five to fifty cents a bushel more than the beans that do not ripen until the cold weather sets in.

SAVE THE LIQUID MANURE.

One of our contributors a short time ago discussed pretty fully the wastes in the manure yard, and among others spoke of the wastes of liquid manure, or as he termed it, the manure juices. This subject is receiving a very great deal of attention among scientific agriculturists, and numerous are the tests and experiments which are being made.

According to the experiments of the best German chemists, the liquid manure from the horse amounts to one and a half tons per year, which contains nitrogen and potash worth \$12.75. The cow furnishes four tons, containing \$14.00 worth of the same elements. These figures show the importance of saving all the liquid manure possible, even if only one half of the whole quantity be voided at the stables. If two horses and ten cows are kept, the liquid manure they would make, provided it could all be saved, would be worth \$165.50 or enough to buy about four tons of good phosphate. If but one-half of it is voided in the barn, and the half of that is wasted for the lack of absorbents, or washed away

by rains, it would require a ton of phosphate to replace the loss.

If it will pay to build a silo for a herd of ten cows, will it not pay to build a cistern to hold the liquid manure of the same number of animals? If dry earth or peat be used as absorbents it would require at least its own weight in the absorbent. Would it not be easier to pump out and spread forty tons of liquid, than to draw in forty tons of dry earth and draw out eighty tons thus saturated with moisture? These are practical questions for the consideration of the farmers, and worthy of their study.

If such a cistern were built, would it not pay to allow soapuds and all waste water from the house to run into it, thus saving whatever of fertilizing value may be in them, and at the same time disposing of a material which is too often a nuisance about the house, and which, in a few years, may so saturate the ground near where the sink pipes discharge as to drain back into the well and pollute the water supply of the house? Such a dilution of the liquid from the stables would only better fit it for application to the soil.

OILING WAGGON WHEELS.

A well-made wheel will endure constant wear from ten to twenty-five years, if care is taken to use the right kind and proper amount of grease, but if this matter is not attended to it will be used up in five or six years. Lard should never be used on a wagon, for it will penetrate the hub and work its way out around the tenons of the spokes and wheel. Tallow is the best lubricator for wooden trees and castor oil for iron hubs, but many of the present axle greases are also excellent; and have the merit of being cheaper and easier to handle. Just grease enough should be applied to the spindle of a waggon to give it a thin coating. This is better than more, for the surplus put on will work out at the ends, and be forced by the shoulder bands and nut washer into the hub around the outside of the boxes. To oil an iron axle tree, first wipe the spindle clean with a piece of cloth wet with spirits of turpentine, and then apply a few drops of castor oil near the shoulder and end. One teaspoonful is sufficient for the whole.

BARNYARD MANURE.

The question of barnyard manure is every day growing a more important one. As the natural fertility of the soil lessens from constant cropping, we are compelled to look about for means of restoration, and hence there never was a time when the contents of the barnyard received more careful attention than now. And justly too; for if we would be successful farmers we must understand the chemistry and economy of manures in relation to their action on the soils. From the lengthy report of Dr. Voelker, a most eminent and reliable authority, we glean the facts given below:

1. The soluble parts of manure are much the most valuable, therefore it is important to save the urine, and to keep the manure protected from the rain. Manure thrown out and exposed to the rain becomes just as worthless as wood ashes thus exposed.

2. Farm-yard manure, in its fresh state, contains soluble phosphates of lime, insoluble nitrogen, and but a small proportion of free ammonia.

3. The urine of horses, cows and hogs, does not contain any considerable amount

of phosphate of lime, but this is largely contained in the drainage of dung heaps, which are more valuable than urine.

4. The most effectual manner of preventing loss in fertilizing matter, when not composted, is to cast the manure directly on the field, whenever circumstances will permit. On all soils with a moderate proportion of clay, there is no waste if the manure is not ploughed in at once. Indeed, it is maintained by some that it is the best to permit manure to lie on the surface and allow the rain to wash it into the soil. In the case of dry soils it may be evenly spread, and allowed to remain for months without appreciable loss; but, on light, sandy soils, it is best to manure with well fermented dung shortly before the crop is put in.

Well rotted dung contains a very much larger proportion of soluble organic and saline mineral matters, than fresh dung. It is also richer in nitrogen, and, weight for weight is more valuable.

During fermentation dung gives off organic matter in a gaseous form; but if properly handled there is no great loss of nitrogen. Organic acids are always formed and gypsum is developed. These fix, or hold the ammonia as fast as it is generated. While fermenting, the phosphate of lime which it contains is more soluble than when the manure is fresh. Ammonia is given off in the interior of the fermenting heap, but is arrested by the organic acids, and the gypsum in the colder external layers. Turning heaps over, therefore, occasions loss, though some think otherwise.

LIVE-FOREVER.

Most of our gardens have a bunch of live-forever and there it is cultivated for its beauty and the curiosity which is attached to it by its great tenacity to life. In some parts of the United States it is becoming a great pest, and is reported by the *American Agriculturist* to be on the increase. It ought to be attended to by our Canadian farmers that it does not become a nuisance in their gardens and fields. Its character certainly would make it a formidable weed since it can find nourishment in a crack in a board or on the roof, only a little less readily than in a good rich soil. We can remember when we were boys at home putting stalks of live-forever in places of the kind and finding them afterwards growing quite thriftily. Better drive the live-forever out now and not let it get established in the gardens and fields.

THE TURNIP FLY.

The wavy-striped Flea-beetle, or "Turnip Fly," (*Haltica striolata*), is a great pest to young turnips when first breaking through the soil. If the young seedlings can be protected at this time until a few leaves form, they usually need no further care. One of the best preventatives is to have the soil rich and well prepared, that the crop may push forward rapidly. Some turnip growers have found it profitable to employ boys with bags attached to curved forked sticks, which are run astride the rows of young plants. The beetles, when thus disturbed, jump into the bag and are afterwards destroyed. A common application is equal parts of wood ashes and land plaster, entirely covering the young turnip leaves. Finely powdered air-slaked lime may be dusted on with a bottle-shaped tin dish, having holes in the bottom, and a wooden handle in the top.

CABBAGES.

It is not too late now to plant cabbages for fall or winter eating. It is a crop that will pay. If it cannot be sold it can be fed to the cattle, the sheep or the hogs.

Select as large varieties as you can, and plant as early as convenient. Plant in rows three feet apart; this will admit the use of a hoe or a cultivator.

It is not a great deal of trouble to plant an acre of cabbage if it is gone about properly. Have the land marked as you would for corn, and have a plant dropped in every hill and planted there.

THINNING FRUITS.

Almost every experienced fruit-grower will concede the expediency of thinning most kinds of fruits, will admit that it makes larger, fairer, better, more salable fruit, that it even increases the bulk of fruit that a tree will yield, and yet, we doubt whether one practical fruit grower in a hundred practices it thoroughly. In the following, by Mr. J. B. Rogers, of Milburn, N. J., contributed to the *American Garden*, we have the arguments in favor of the practice well stated:

Man, as a general rule, is avaricious. In the pursuit of gain he overtaxes his physical powers, and early death is the result. He plants a tree or bush, excites by stimulating manures its fruiting capacity to the highest degree, and in his eagerness for abundant crops causes weakness and an early death.

Nature perpetuates all fruit by the production of seeds. The maturing of these makes the heaviest drain on the vital energies of the fruit. Thinning fruits lessens the number of fruit to be ripened by a tree, and therefore increases its vigor. Judicious thinning improves the quality, quantity and general appearance.

Peaches should not be allowed to be nearer each other on a tree than four inches, and will then, as a rule, produce more in quantity than when nearer. Grapes, left to themselves, set many bunches of small size, having many green berries, ripening unevenly, remove the greater part, and you will be rewarded. The tendency of the Bartlett Pear is to over-production. Thin severely while the fruit is quite small. Repeat the same operation when the pear has made about half of its rapid growth toward maturity. Ripen these with care, and the result will be Bartletts in perfection, and a week or ten days earlier than those picked at the usual time. The lack in size is more than compensated for in quality. Plums, if not attacked by the curculio, must be thinned by hand. Thinning apples acts beneficially, and has a tendency to promote an annual crop of fruit. Pick part of the crop of currants from each bush while green, for use, and mark the result. Gooseberries being used generally before ripe, are not as exhausting upon the bushes as other small fruits.

Thinning of fruits is also a great protection against disease of the tree and fruit. It increases the vigor and health of the plant or tree, adding size and color to the fruit, imparting increased flavor, thereby gratifying the palate and pleasing the eye.

The demand for strictly prime fruit is much greater than the supply, and those who produce the best are always sure of obtaining the best prices.

Lord Coleridge said that John Bright built himself up on Milton. If Mr. Bright were an American and an Arkansaw man, he would have built himself up on Bacon.

HIS SOMBRE RIVALS.

By EDWARD P. ROE

AUTHOR OF "BARRIERS BURNED AWAY,"

"OPENING A CHESTNUT BURN,"

"WITHOUT A HOME," ETC.

"I reached Centerville late in the evening, and soon learned that the forward movement would take place in the night. Having put my horse in thorough condition for the morrow, and made an enormous supper through the hospitality of some staff officers, I sought a quiet knoll in which to sleep in soldier fashion under the sky, but found the scene too novel and beautiful for such prosaic oblivion. I was on the highest ground I could find, and beneath and on either side of me were the campfires of an army. Around the nearest of these could be seen the forms of the soldiers in every picturesque attitude; some still cooking and making their rude suppers, others executing double-shuffles like war-dances, more discussing earnestly and excitedly the prospects of the coming day, and not a few looking pensively into the flames as if they saw pictures of the home and friends they might never see again. In the main, however, animation and jollity prevailed; and from far and near came the sound of song, and laughter, and chaffing. Far down the long slope towards the dark, wooded valley of Bull Run, the light of the fires shaded off into such obscurity as the full moon permitted, while beyond the stream in the far distance a long, irregular line of luminous haze marked the encampments of the enemy.

"As the night advanced the army grew quiet; near and distant sounds died away; the canvas tents were like mounds of snow; and by the flickering, dying flames were multitudes of quiet forms. At midnight few scenes could be more calm and beautiful, so tenderly did the light of the moon soften and etherealize everything. Even the parked artillery lost much of its grim aspect, and all nature seemed to breathe peace and rest.

"It was rumored that McDowell wished to make part of the march in the evening, and it would have been well if he had done so. A little past midnight a general stir and bustle ran through the sleeping army. Figures were seen moving hurriedly, men forming into lines, and there was a general movement. But there was no promptness in action. The soldiers stood around, sat down, and at last lay on their arms and slept again. Mounting my horse, with saddle-bags well stuffed with such rations as I could obtain, I sought the centres of information.

"It appears that the division under General Tyler was too slow in starting, and blocked the march of the Second and Third Divisions. As I picked my way around, only a horse's sagacity kept me from crushing some sleeping fellow's leg or arm, for a horse won't step on a man unless excited.

"Well, Tyler's men got out of the way at last in a hap-hazard fashion, and the Second and Third Divisions were steadily moving, but hours behind time. Such marching! It reminded one of countrymen streaming along a road to a Fourth of July celebration.

"My main policy was to keep near the commander-in-chief, for thus I hoped to obtain from the staff some idea of the plan of battle and where its brunt would fall. I confess that I was disgusted at first, for the general was said to be ill, and followed his columns in a carriage. It seemed an odd way of leading an army. But he came out all right; and he did his duty as a soldier and a general, although everyone is cursing him to-day. He was the first man on the real battle field, and by no means the first to leave it.

"Of course I came and went along the line of march, or of straggling rather, as I pleased; but I kept my eye on the general and his staff. I soon observed that he decided to make his headquarters at the point where a road leading from the great Warrenton Turnpike passed to the north through what is known as the 'Big Woods.' Tyler's command continued westward down the turnpike to what is known as the Stone Bridge, a single substantial arch at which the enemy were said to be in force. It was now clear that the first fighting would be there, and that it was McDowell's plan to send his main force under Hunter and Heintzelman farther north through the woods to cross at some point above. I therefore followed Tyler's column, as that must soon become engaged.

"The movements had all been so mortally slow that any chance for surprise was lost. As we approached the bridge it was as lovely a summer morning as you would wish to see. I had ridden ahead with the scouts. Thrushes, robins, and other birds were singing in the trees. Startled rabbits, and a mother bird with a brood of quails, scurried across the road, and all seemed as still and peaceful as any Sunday that ever dawned on the scene. It was hard to persuade one's self that in front and rear were the forces of deadly war.

"We soon reached an eminence from which we saw what dispelled at once the illusion of sylvan solitude. The sun had been shining an hour or two, and the bridge before us and the road beyond were defended by abatis and other obstructions. On the farther bank a line of infantry was in full view with batteries in position prepared to receive us. I confess it sent a thrill through every nerve when I first saw the ranks of the foe we must encounter in no mere pageant of war.

"In a few moments our forces came up, and the first one brigade deployed on the left, another on the right of the pike. I witnessed a scene that had to be seen to be believed. A great thirty-pound gun unlimbered in the centre of the pike, and looked like a surly mastiff. In a moment an officer, who understood his business, sighted it. There was a flash, bright even in the July sunlight, a grand report awakening the first echoes of a battle whose thunder was heard even in Washington, and a second later we saw the shell explode directly over the line of Confederate infantry. Their ranks broke and melted away as if by magic."

"Good shot, well aimed. O heavens! what would I not give to be thirty years younger. Go on, Graham, go on;" for the young man had stopped to take a sip of wine.

"Yes, Graham," cried Hillard, springing to his feet; "what next?"

"I fear we are doing Mr. Graham much wrong," Grace interrupted. "He must be going far beyond his strength."

The young man had addressed his words almost solely to the major, not out of courtesy, but also for a reason that Grace partially surmised. He now turned and smiled into her flushed, troubled face, and said, "I fear you find these details of war dull and wearisome."

"On the contrary, you are so vivid a raconteur that I fear Warren will start for the front before you are through."

"When I am through you will think differently."

"But you are going beyond your strength."

"I assure you I am not; though I thank you for your thoughtfulness. I never felt better in my life; and it gives me a kind of pleasure to make you all realize things as I saw them."

"And it gives a great pleasure to listen," cried Hillard. "Even Mrs. Mayburn there is knitting as if her needles were bayonets; and Grace has the flush of a soldier's daughter on her cheeks."

"O stop your chatter, and let Graham go on," said the major,—"that is, if it's prudent for him," he added from a severe sense of duty. "What followed that blessed shell?"

"A lame and impotent conclusion in the form of many other shells that evoked no reply; and beyond his feeble demonstration Tyler did nothing. It seemed to me that a determined dash at the bridge would have carried it. I was fretting and frowning about when a staff-officer gave me a hint that nothing was to be done at present,—that it was all only a feint, and that the column that had gone northward through the woods would begin the real work. His words were scarcely spoken before I was making my way to the rear. I soon reached McDowell's carriage at the intersection of the roads, and found it empty. Learning that the general, in his impatience, had taken horse and galloped off to see what had become of his tardy commanders, I followed at full speed.

"It was a wild, rough road, scarcely more than a lane through the woods; but Mayburn was equal to it, and like a bird carried me through its gloomy shades, where I observed not a few skulkers cowering in the brush as I sped by. I overtook Heintzelman's command as it was crossing the run at Sudley's Ford; and such a scene of confusion I hope never to witness again. The men were emptying their canteens and refilling them, laving their hands and faces, and refreshing themselves generally. It was really quite a picnic. Officers were storming and ordering "the boys"—and boys they seemed, indeed—to move on; and by dint of much profanity, and the pressure of those following, regiment after regiment at last struggled up the farther bank, went into brigade formation, and shambled forward."

"The cursed mob!" muttered the major.

"Well, poor fellows! they soon won my respect; and yet, as I saw them there, stopping to pick blackberries along the road, I did feel like riding them down. I suppose my horse and I lowered the stream somewhat as we drank, for the day had grown sultry and the sun's rays intensely hot. Then I hastened on to find the general. It seemed as if we should never get out of the woods, as if the army had lost itself in an interminable forest. Wild birds and game fled before us; and I heard one soldier call out to another that it was 'a regular Virginia coon-hunt.' As I reached the head of the column the timber grew thinner, and I was told that McDowell was reconnoitring in advance. Galloping out into the open fields, I saw him far beyond me, already the target of Rebel bullets. His staff and a company of cavalry were with him; and as I approached he seemed rapidly taking in the topographical features of the field. Having apparently satisfied himself, he galloped to the rear; and at the same time Hunter's troops came pouring out of the woods.

"There was now a prospect of warm work, and plenty of it. For the life of me I can't tell you how the battle began. Our men came forward in an irregular manner, rushing onward impetuously, halting unnecessarily, with no master mind directing. It seemed at first as if the mere momentum of the march carried us under the enemy's fire; and then there was foolish delay. By the aid of my powerful glass I was convinced that we might have walked right over the first thin rebel line on the ridge nearest us.

"The artillery exchanged shots awhile. Regiments under the command of General Burnside deployed in the fields to the left of the road down which we had come; skirmishers were thrown out rapidly, and began their irregular firing at an absurd distance from the enemy. There was hesitancy, delay; and the awkwardness of troops unaccustomed to act together in large bodies was enhanced by the excitement inseparable from their first experience of real war.

"In spite of all this the battle-field began to present grand and inspiring effects. The troops were debouching rapidly from the woods, their bayonets gleaming here and there through the dust raised by their hurrying feet, and

burning in serried lines when they were ranged under the cloudless sun. In every movement made by every soldier the metal points in his accoutrements flashed and scintillated. Again there was something very spirited in the appearance of a battery rushed into position at a gallop—the almost instantaneous unlimbering, the caissons moving to the rear, and the guns at the same moment thundering their defiance, while the smoke, lifting slowly on the heavy air, rises and blends with that of the other side, and hangs like a pall to leeward of the field. The grandest thing of all, however, was the change in the men. The uncouth coarsely-jesting, blackberry-picking fellows that lagged and straggled to the battle became soldiers in their instincts and rising excitement and courage, if not in machine-

Bucklin's Arnica Salve.

The best salve in the world for cuts, bruises, sores, ulcers, salt rheum, fever sores, tetter, chapped hands, chilblains, corns, and all skin eruptions, and positively cures piles, or no pay required. It is guaranteed to give perfect satisfaction, or money refunded. Price 25 cents per box. For sale by all druggists.

PROF. LOW'S MAGIC SULPHUR—Healing, soothing, and cleansing for all eruptive diseases of the skin. Delightful for toilet use.

The Housewife.

A popular domestic journal for American homes, will be sent for one year free to every lady who will send at once the names and addresses of 10 married ladies, and 50 cts. (no stamps taken). Best paper for either young or old housekeepers in existence. This offer is made only to secure names to whom to send sample copies, as we know every lady who once sees THE HOUSEWIFE will subscribe for it. Regular price \$1.00 per year. Address at once THE HOUSEWIFE, Rochester, N. Y.

It's much easier to lay plans than it is to hatch them.

NATIONAL PILLS are unsurpassed as a safe, mild, yet thorough, purgative, acting upon the biliary organs promptly and effectually.

HOW TO MAKE CANDY.—This book gives full directions for making all kinds of plain and fancy candy. The recipes for making caramels, chocolate drops, French mixed and all other kinds of candies contained in this book are the same as used by the leading city confectioners. Any one can have these candies at home at less than one third the usual cost. Sent postpaid for 50 cents (no stamps taken). Address

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"The Woman's Physician."

A common sense medical work for ladies only. Fully answers all questions which modesty prevents asking a male physician. Gives causes and symptoms of all diseases of the sex, with positive cure for each in plain language, written by ladies who have made these diseases a life study. A plain talk in delicate language which every woman, young and old, should read. It is recommended by many eminent lady physicians as a safe guide for the sex. Handsomely bound and illustrated. Sent postpaid for \$1.00. Address the

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FREEMAN'S WORM POWDERS are safe in all cases. They destroy and remove Worms in children or adults.

Saved From the Scalpel.

A Toronto lady, Mrs. Berkenshaw, contracted a disease of the knee joint and was advised to submit to a surgical operation by the best physicians attending; all other treatment having failed, when Hagar's Yellow Oil was tried and speedily effected a cure. It is the unfailing remedy for accidents and emergencies, and is for external and internal use.

DAIRY.

THE DAIRY INTEREST IN EUROPE.

James Long gives the following interesting statement in regard to the number of milch cows, including those in milk or those coming in as per the official reports; and institutes some comparison between home and factory operations. They will be found interesting to the readers of the FARMER. "England and Wales have 1,910,000 such cows; Ireland 1,400,000, and Scotland 385,000. [Total in Great Britain 3,705,000.] France has 7 1/2 millions; Sweden 1 1/2 millions; Holland 1 million; Denmark nearly one million; Norway 3/4 million. Great Britain has only one cow to about twelve cultivated acres; Norway has 1 to 4 acres. Sweden about 1 to 8 acres; Denmark 1 to 9 1/2 acres; Germany 1 to 10, although she has nearly twice as many cultivated acres as England. Belgium 1 to between 7 and 8 acres, while even France, the land of the vine, is about equal with Great Britain.

'Now it will naturally be asked how the profits under one system compare with those of the other? I will give some data as to that, but first let me remark that I advocate the factory system, chiefly as a means of encouraging the farmer to produce milk, which he certainly will not do under present circumstances if he has to stand the risks of the trade in large cities, or to devote most of his time and that of his family to the manufacture of butter and cheese. With a factory at hand, good prices, little trouble and a regular monthly cash check, the whole thing looks different. and I confess I know many instances in my own country where it would be gladly welcomed. Now, first of all, I will make a comparison between a butter dairy farm, and a butter factory, both of which actually exist in England. The farmer makes from 60 lbs. to 100 lbs. of butter per week, and his prices are from 24 to 30 cts. in summer, and sometimes 32 cents in winter. He can not obtain a ready sale for fresh butter, and so he pots it and sells it to a dealer, 26 cts. a pound being a fair average price, as it is in most districts which are not near large centres of population. To make a fair comparison, I am obliged to assume that his milk is of the usual farm quality, and that each pound of butter is obtained from twelve quarts. At this rate, his milk sent into the factory would yield 16 cents a gallon, or about \$450 per week, while the same quantity converted into butter by himself would produce only about \$28 30, minus the skim milk and buttermilk, while all labor would be dispensed with.'

SHE KICKED NO MORE.

We are in receipt of a letter from a correspondent in one of the eastern districts who claims to have a never-failing method of putting an end to kicking in dairy cows. He says that his method is better than all the halters, chains, etc., which can be carried into a barnyard, and says that he has tried it without fail dozens of times.

When you start to milk if the cow begins to kick just catch her leg and hold it until a companion milks her. She will then, our correspondent claims, know what her leg is kept held up for, whereas if she kicks and is tied up a quarter of an hour afterwards she has no knowledge what she is tied for. We have no doubt whatever that our friends has succeeded with the plain, but the objection to it in our mind is the "holding up process." We just im-

agine ourselves and our better half attending to our "Molly" these hot days in such a way as our friend suggests. We are convinced that we should be constrained to recommend another method of curing a kicking cow, viz, shooting her. However, laying such jocular strains aside, there is no doubt that the plan recommended by our correspondent will prove effective, and those troubled with kicking cows ought to try it. But the best plan, in our opinion, to cure kicking cows is to have no kicking calves. Care, kindness, humanity and gentility in the rearing of calves generally gets the dairy rid of kicking cows.

HORTICULTURE.

FOR THE CANADIAN FARMER.—SEASONABLE NOTES ON HORTICULTURE.

Currant Culture for Profit.

BY LINUS WOLVERTON, M. A., GRIMSBY.

Currant bushes are usually the most neglected plants in the farmer's garden; they are often allowed to become grass-bound along the fence where it is impossible to cultivate them except by hand; and because they will endure much neglect, they receive it unmercifully. The old Red Dutch too, is the kind commonly grown, a good bearer, it is true, but too small, giving endless trouble in stemming, and its berries grow on the stem so near the wood that they cannot be gathered without being smashed. Under such circumstances it is no wonder that people should say that "there is no profit in currant culture."

Having had considerable experience in growing currants for market, we beg to differ from the above statement, and call attention to the following conditions of success under three heads, viz:—(1) Kinds; (2) Culture; (3) Treatment of insect enemies.

Kinds:—Of these there are two classes, 1st., black; 2nd., red and white. The only accessible kinds of black currants worth growing for market are the *Black Naples* and *Lee's Prolific*. The old *Black English* with its three or four berries on a stem, is almost worthless. A new kind is being introduced in England, called the *Black Champion*, said to excel any other, but we have to be careful about new varieties of any fruit.

Many people think that because black currants sell at a higher price in the market than Red currants, that they are therefore more profitable; but this is a mistake in most instances. The difficulty is to make them bear. To succeed in this, they need a rich, heavy soil, and good cultivation; and to be planted about three feet apart in rows five or six feet apart. Under such conditions good returns may be expected.

The most profitable Red currant is the *Red Cherry*; though some claim *La Versailles* is equally good. It does not fruit as abundantly as some kinds, but we are not always advocating thinning for larger and finer fruit, and here we have just the realization of our wishes. The new currant, so much "cracked up," of late, viz: *Fay's Prolific* may be better than the *Cherry*. Certainly its bunches are longer and it is wonderfully thrifty and promises to be enormously productive, but if it is smaller, then the charm is gone.

White currants are a failure for profit. The usual report from commission men is "Don't send any more white currants," and the prices of them are most unsatisfactory. The *White Grape* is the most

commendable and is quite desirable for home use, because it is less acid than the Red varieties.

Culture:—Careful cultivation of the currant bushes is indispensable to success. At this season, while the fruit is growing, the cultivator and the hoe needs to be freely used to keep down weeds and grass and to promote to growth. Care must be used not to dig or plough about the bushes, for this would injure the roots which lie near the surface. The application also of well-rotted compost or ashes will repay the grower in the size of the fruit. This we must emphasize, as the prime effect in successful currant growing, viz: to produce large, fine berries. For such fruit there is always ready sale at the highest price.

Pruning of currant bushes is also most important. As the first buds appear on the new growth only, it is necessary in fall or early spring to cut back the old canes in such a way as to develop a plentiful stock of young shoots. The tree system of pruning currants was at one time most favored, but since the stems are subject to injuries by insects, and otherwise it is now recommended by many to encourage the growth of a number of young suckers and thus prolong the life of the bushes.

Insect Enemies:—Of these there are at least a dozen; too many to be treated of in a brief article like this. We will simply call attention to the most common and destructive one, viz. the imported Saw-fly (*Nematus Tentoriosus*) which from being very rare in Canada ten years ago, may now be found in almost every garden. This fly lays its eggs upon the leaves, and soon the young worms appear in companies of thirty or forty feeding upon a single leaf. Early in the season hand-picking may be a sufficient remedy, but it is now too late for that, for the worms have scattered throughout the bushes. The most efficient means now of ridding the garden of them is the use of powder-hellebore. It should be mixed with water, an ounce to a pailful, and the bushes showered from a watering can. This operation will need repeating occasionally throughout the season to ensure the growth of the fruit, and the preservation of the bushes. Farther notes on the currant or hints how to market it may follow at some future time.

Fluid Lightning cures neuralgia in one minute.

Fluid Lightning cures toothache in one minute.

Fluid Lightning cures face ache in one minute.

Fluid Lightning cures lumbago in one minute.

Fluid Lightning cures rheumatism in one minute.

Fluid Lightning cures any pain or ache instantly. Price 25 cts. per bottle at T. Cumines' drug store.

An Editor's Tribute.

Theron P. Keator, Editor of Ft. Wayne, Ind., "Gazette" writes: "For the past five years have always used Dr. King's New Discovery, for coughs of most severe character, as well as for those of a milder type. It never fails to effect a speedy cure. My friends to whom I have recommended it speak of it in same high terms. Having been cured by it of every cough I have had for five years, I consider it the only reliable and sure cure for coughs, colds etc." Call at any drug store and get a free trial bottle. Large size \$1 00

FAMOUS:—Digestion must be promoted by increasing the flow and strength of the gastric juice, and this Golden Fruit Bitters will effectually do.

A Life Saving Present.

Mr. M. E. Allison, Hutchinson, Kan.: Saved his life by a simple trial bottle of Dr. King's New Discovery, for consumption, which caused him to procure a large bottle, that completely cured him, when Doctor, change of climate and everything else had failed. Asthma, bronchitis, hoarseness, severe coughs, and all throat and lung diseases, it is guaranteed to cure. Trial bottles free at H. W. Hobson's drug store. Large size \$1.00.

These are Solid Facts.

The best blood purifier and system regulator ever placed within the reach of suffering humanity, truly is Electric Bitters. Inactivity of the Liver, Biliousness, Jaundice, Constipation, Weak Kidney, or any disease of the urinary organs, or who ever requires an appetizer, tonic or mild stimulant, will always find Electric Bitters the best and only certain cure known. They act surely and quickly, every bottle guaranteed to give entire satisfaction or money refunded. Sold at fifty cents a bottle at any drug store.

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain of cutting teeth? If so, speed at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable. It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system. Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the prescription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.

Prominent among the greatest medical discoveries, by the many cures it has effected, McGregor's Speedy Cure leads the van. Subject to the minutest chemical analysis, it has been found to contain none of those injurious ingredients characterizing the worthless specifics daily offered to the public. Every ingredient possesses a peculiar adaptability to the various complaints for which it has been compounded, and its efficacy is being established by testimonials hourly received. We are therefore confident that we have a preparation which we can offer to the public with the assurance that it will be found not only a relief but an absolute cure for dyspepsia, liver complaint, indigestion, constipation and impure blood. Free trial bottles at T. Cumines drug store.

To the Ladies.

McGregor & Parke's Carbolic Cerate will cure any case of pimples on the face, or rough skin on either hands or face and leave them soft as silk. It will also heal any sore when all other preparations fail. Thousands have tested it. Ask your druggist for McGregor & Parke's Carbolic Cerate, and do not be persuaded to take anything else claimed to be as good. It is but 25c. per box at T. Cumines' drug store.

Rest and Comfort to the Suffering.

"Brown's Household Panacea" has no equal for relieving pain, both internal and external. It cures pain in the side, back or bowels, sore throat, rheumatism, toothache, lumbago and any kind of a pain or ache. "It will most surely quicken the blood and heal, as its acting power is wonderful." "Brown's Household Panacea," being acknowledged as the great Pain Reliever, and of double the strength of any other elixir or liniment in the world, should be in every family handy for use when wanted, "as it really is the best remedy in the world for cramps in the stomach, and pains and aches of all kinds," and is for sale by all druggists at 25 cents a bottle.

Nine Physicians Outdone.

Mrs. Helen Pharviz, No. 331 Dayton St., Chicago, Ill., is now in her sixty-eighth year, and states that she has suffered with consumption for about ten years, was treated by nine physicians, all of them pronouncing her case hopeless. She had given up all hopes of ever recovering. Seven bottles of Dr. King's New Discovery for consumption completely cured her. Doubting ones, please drop a postal and satisfy yourself. Call at any drug store and get a free trial bottle.

PROF. LOW'S MAGIC SULPHUR—Healing, softening, and cleansing for all eruptive diseases of the skin. Delightful for toilet use.

Contributors, &c., to the "Canadian Farmer."

HORTICULTURE.
 T. O. Robinson, Owen Sound.
 G. L. Whitney, Lecturer Michigan State Grange, Muskegon, Mich.
 P. H. Henderson, Bertie Vineyards, Stevensville, Ont.

POULTRY.
 Geo Elliott, — a taker of eight prizes at the Provincial Poultry Show—Port Robinson Ont.

APIARY.
 D. A. Jones, of the Beekeepers Association of Ontario, Beeton Ont.
 R. McKnight, Bee-Keepers Association, Owen Sound.

MAPLE SYRUP, SUGAR, &c
 Levi N. Whitman, an extensive manufacturer Knowlton, Quebec.

GRAPE CULTURE.
 Dr. Joy, Tilsonburg, Ont.

VETERINARY.
 G. Elliott, V. S., St. Catharines, member Ontario Veterinary College.

GENERAL FARM SUBJECTS.
 M. McQuade, Egmondville, Ont.
 S. T. Pettit, Belmont, Ont.
 H. S. Ureod, Newport, N. B.
 George Creed, South Hawdon, N.B.

LADIES' DEPARTMENT.
 Mrs. S. H. Nelson, Grimsby, Ont

The Canadian Farmer.

The Only Weekly Agricultural Paper in Canada.

Is published every Wednesday morning at the Welland Printing and Publishing House, Welland, John Ferguson, M.P., sole proprietor.

WEDNESDAY, JUNE 25, 1884.

INDUSTRIAL EXHIBITION.

By a reference to our advertising columns it will be seen that Canada's great fair, the Industrial Exhibition, opens in Toronto on September 10th and continues to September 30th. The arrangements made this year are much more extensive than ever before, and it is fully expected that the affair will be an event of even greater magnitude than in years past. On Monday and Tuesday, September the 15th and 16th, a grand fireman's demonstration will take place. On September the 17th, will be the farmers' grand gala day under the auspices of the Dominion and Provincial Granges. This will no doubt be one of the largest gatherings of farmers ever held in the Dominion. All railways have made reductions on rates, giving return tickets fare and a third, live stock and all other exhibits go free one way. Every department in which the farmer and the ladies are interested has received the fullest attention. We shall be present and trust to meet on Farmers' Day thousands of the readers of the FARMER out for a grand holiday.

AMONG THE FARMERS.

A Veteran Honored.

When the Editor of the CANADIAN FARMER was in Toronto on Monday last he received a kind invitation to join a number of prominent gentlemen who were the next evening or so going to visit Scarborough Junction. In order to do honor to the veteran ploughman of York, James Patton, Esq., who resides near to Scarborough. We were very sorry indeed that pressing business engagements prevented our being present on such a pleasing occasion, but we are glad to know that the evening passed off very pleasantly, and that there were present a large number of prominent gentlemen, among them some of the leading public men of the district. Mr. Patton is indeed the veteran ploughman of York. He is looked up to as the father of the prize ploughmen of the county. Mr. Patton's first ploughing match was ploughed in a quiet field, now occupied by the

centre of the busy city of Toronto. The prizes which he has since won are very numerous.

It was thought at first that it would be best to surprise the old gentleman, but a reconsideration gave him a short notice of the presentation, so that when the friends dropped in upon the old ploughman, he was not so much surprised but deeply affected and gave all a very cordial and hearty reception. Mr. John Gibbons acted as chairman and Wm. Rennie of Toronto, who was largely instrumental in arranging for the presentation, read an address, and presented Mr. Patton with a well-filled purse. The address was handsomely illuminated. Mr. Patton replied very appropriately, and Rev. Dr. Scaddon, Mr. Wm. Hood and others delivered friendly addresses, expressive of their esteem for Mrs. Patton, and their hopes that he would, with Mrs. Patton, long live to enjoy the fruits of their labors.

RECEIVED.

We have been favored with a copy of a little manual just published by Fowler & Wells, at 753 Broadway, N. Y., entitled, "The Horses, their feed and their feet." The book deals admirably with hundreds of questions, upon which every one who owns or drives a horse should be intelligent. The aim of the author, as stated in the introduction, is the proper one, viz.: not so much to instruct you how to cure the diseases of the horae, but to instruct you how to prevent these diseases and troubles coming on. We heartily commend the book to our readers, and have no doubt they would be repaid a dozen fold by sending for it, and carefully digesting its contents. The work has rapidly sold through the first edition and the one before us: the second is enlarged and illustrated.

"Settler's Pocket Guide to Homesteads in the North-west," by John T. Moore, 82 King St. East, Toronto. The pamphlet contains some most valuable information regarding the soil, climate, etc., of the Canadian North-west. Those who desire information upon those subjects, should write Mr. Moore for a copy of this little work.

A NEW ERA.

There can be no doubt that the introduction of machines for tile draining introduces a new era in the progress of agriculture. Long have farmers recognized the benefits to be derived from tile draining, but hitherto the cost has been so great that only the wealthiest class of farmers felt themselves justified in engaging in it. The larger part of this cost was incurred in cutting the trench, and now that a machine has been devised which does this so rapidly, cheaply and completely there is no excuse for not doing a large amount of tile draining. There are large quantities of land in Canada that badly need it, and we hope to see the farmers go into it extensively. Mr. Wm. Rennie, of Toronto, in this issue advertises his tile ditching machine which has done such extremely rapid work, and which is carrying the market of the United States by storm. By addressing him the fullest particulars can be obtained. A machine purchased by Dr. Ferguson, M.P., President of the FARMER Publishing Co., from Mr. Rennie a few weeks ago, works admirably. We can therefore speak from a personal knowledge of the superiority of the article which Mr. Rennie advertises.

THE EVAPORATING INDUSTRY.

It is noticeable that within the past two or three years a new and valuable industry has arisen in Canada. We refer to the business of fruit evaporating, now extensively carried on in some parts of the Dominion, and likely to be engaged in much more extensively in the very near future. This now means of fruit preservation has, whilst affording an unequalled means of keeping fruit for table use, proven to be a very profitable occupation. So much so indeed, that those who have thus far invested their money in it are perfectly willing and anxious to invest more in the same business. We know of no recently opened up industry which promises to be a greater source of profit to our agriculturists than this one. We need say scarcely anything as to the manner in which the evaporation system does its work. All who have tasted evaporated fruit, and compared it with the dried article, are witnesses of the superiority of the new over the old process. There can be little doubt that the introduction of the evaporator process will introduce a new era in fruit raising. This branch of farming has, with few exceptions, been largely neglected throughout the country. This is the more to be regretted, because the province—Ontario more especially—are in many ways adapted for fruit raising, and the fruits which we are enabled to raise are much more valuable in the markets of the world than those of tropical climes. Every pound of our evaporated apples is worth fully in Canadian markets two pounds of the tropical dried fruits and evaporated peaches have a value, three or four times as great as figs, dates, raisins, prunes, etc. In other words our fruit is immensely valuable, and should be looked at as of worth the same degree of importance as any other of our own principal products. As such, it demands the careful attention of every farmer. There should be more fruit raised, and no matter how much there is raised, there need be no fear that it will be a drug on the market. The world is open for Canadian fruits, and the evaporation process supplies a means by which all that cannot be handled profitably in the fresh state can be kept from spoiling, to be disposed of at the very best advantage. Heretofore a large amount of fruit, especially apples, has gone to waste during the summer and fall seasons. This need not be any more. It can all be saved by using evaporators. The system of evaporating fruit has many different points of excellence, but the principal points in its favor are the speed with which it can be done, and the excellence of the flavor of the fruit thus prepared. The flavors are indeed the very natural flavor, and it would be difficult for an expert to tell any difference between fresh peaches stewed, and evaporated peaches properly soaked and stewed. Just so is it with the balance of the fruits. The process of evaporation is nothing more than subjecting cut fruits to dry hot currents of air, thus drying the surface quickly. It presents no discoloration, and forms an artificial skin or cuticle, and seals the cells containing acid and starch which yield glucose or fruit sugar. Machinery in abundance can be had for the process, and there are evaporators made having a capacity of from 3 bushels to 150 bushels in a day. Every farmer ought to have an evaporator for use at home. He would find it to pay for itself a hundred times every year.

A SAD ACCIDENT.

We do not aim at making the CANADIAN FARMER a news letter to its readers, since numerous other ably conducted newspapers do that duty well, but a reference to a terrible accident which has just happened within sight of our office of publication, will not, we are confident, be considered out of place.

On Sunday morning last, Welland was the scene of one of those terrible railway accidents, which are now becoming so frequent on our principal lines of railway. Two trains going very nearly at full speed collided not twenty feet from the depot, and as a result two men were killed and two wounded. The shock of the collision was heard almost all over the place, it waking many from their slumbers. The news spread rapidly, and in a very short time the townspeople, among the number not a few kind ladies, were on hand to render all the assistance in their power. We were there ourselves [in the practice of our old profession, endeavoring to do something for the wounded, and some most heart-rending sights met our eyes. Just as we reached the spot one poor fellow had been taken from the wreck dead, and was being borne away with tender hands. Another almost dead was a moment afterwards taken into the waiting-room—it was supposed to quietly die. In a little while, however, he showed signs of recovery, and is now it is thought out of danger. To a house just near the track had been taken another of the injured. His limbs was all but severed just above the knee, and it was evident he could survive but very few moments. He talked fondly of his widowed mother, and was remarkably brave. Death relieved him, for in a few moments his spirit took its flight. Another one of the train hands was injured in the foot, but not severely. The cars were piled on top of one another, and presented a wild looking sight. A number of them were smashed to fragments. One of the engines were literally broken to pieces, the other was badly injured. The accident has cast a gloom over the place, and will bring sadness, no doubt, to a number of hearts.

THE MAPLE BORER AGAIN.

Mr. Wm. Saunders, the eminent Canadian naturalist, has again given the note of warning against the maple borers. Last year he announced their presence and recommended prompt action and as a result little harm was done. He now states that he has examined some hundreds of trees and found the borer present in quite a number, especially in parts where the bark has been rubbed. Mr. Saunders recommends as treatment that the trees be washed with a mixture described in his own language as follows:

"The mixture to be applied to the trees may be made either from common hard or soft soap melted and diluted to the consistency of paint, with a strong solution of washing soda dissolved in water and applied to the bark with a brush. The application should be made on a dry day, when the soap will soon harden and form a coating which rain will not easily wash off.

Thieves up north are stealing the fleeces just taken from the sheep. This could hardly be termed pulling the wool over the eyes of the farmers, but rather a way from the same. We charge nothing for this joke.

AGENTS.

We want agents for the FARMER in every county in Canada. A liberal commission will be paid to good live reliable parties. The FARMER is increasing its circulation every day, and we intend to double its already large circulation in the coming six months.

Your assistance is solicited. For terms, etc., write to the CANADIAN FARMER, Welland, Ont., Drawer A.

PROVINCIAL EXHIBITION.

The Provincial Exhibition under the auspices of the Agriculture and Arts Association will be held this year in Ottawa, commencing on Sept. 10th. and closing on Sept. 20th. We will give full particulars in due time. In the meantime prize lists, etc., can be had from T. C. Wade, secretary of the Association, Toronto, Ont.

The Massachusetts Legislature at its recent session appropriated \$63,000 for agricultural purposes, viz., Agricultural College, \$36,000; Agricultural Societies, \$17,200; Members of State Board of Agriculture for travelling expenses, \$1,600; expenses of country meetings of Board, \$800; enforcing the laws against the adulteration of milk and its products, \$6,000; for investigating the causes of abortion in cows, \$2,000.

CORRESPONDENCE.

This page will be devoted to the exclusive use of correspondents. All of our readers are invited to write upon subjects of interest to agriculturists.

CURE FOR BLOAT.

ED. CANADIAN FARMER.—A couple of weeks ago I noticed in your columns a couple of articles upon bloat in cattle, and its prevention and cure. Some time ago I was unfortunate enough to lose a couple of cattle by this means, having turned them into a clover patch after their receiving nothing but dry hay. Naturally, after I had experience, I inquired very carefully into the cause and cure of bloat, and I think I can now prevent it as well as relieve, if it should be brought on. The cause is the formation of a large amount of gas in the stomach and intestines, to which there is given no escape. To prevent this I am careful to prepare my cows to go on grass by feeding them soft food mixed with the dry for a week or so before putting them to pasture. I have tried the following cure a dozen of times, and never saw it fail. Take a piece of chalk about as large as a hen's egg, break it into a powder, and then mix it with a quart of strong cider vinegar. In absence of vinegar, pour boiling water over the chalk and give the mixture to the animal when quite warm. This mixture will also relieve colic in a horse very quickly. I have tried this remedy enough to know that it is a good one, and it may be of use to your readers. A. CREWS.

WHITE SPECKS.

ED. CANADIAN FARMER.—A little while ago some of your correspondents discussed the cause of white specks in butter, and how to get rid of them. I do not have them, and I make a large amount of butter. I think that the main point in preventing them is to observe the following rules which should be hung up in every dairy:

1. Have cream crocks well scalded.
2. Always cool the milk before putting in the crocks,

3. Never put cold and warm milk together.

4. Keep the milk in such a temperature that it will thicken slowly.

5. Churn at the proper temperature, not having the butter scalded.

6. When the butter is done put it at once in a well-cooled butter bowl.

7. Wash all the milk out of it thoroughly.

By observing these rules you won't have any white specks or many other imperfections. Yours,
A FARMER'S WIFE.

ONTARIO BEE-KEEPERS' ASSOCIATION

A special meeting will be held in the city hall, Toronto, on Thursday, July 3rd, at one o'clock. The executive, and as many members as can conveniently attend, also the officials of county and district associations, are earnestly requested to be present, as important matters are to be considered.

JACOB SPENCE, Sec. Treas.

Toronto, June 18th, 1884.

POULTRY.

ROUP.

Roup is one of the most pestilential disorders the breeder has to combat, and it requires prompt attention and immediate removal of the afflicted birds from the flock of breeding birds, else the entire flock will soon be contaminated, the disorder being spread through the flock through the medium of the drinking water. Where there is running water through the poultry yard, this danger of infection is limited to the minimum.

Roup is indicated by a thick discharge from the nose and watering of the eyes. The eyes become swollen, and, as the disease progresses, the eyes become entirely closed. As this disease comes from continued exposure to wet and dampness, and is a severe form of catarrh or cold, preventatives should be taken. In most cases the disease will run its course in a week or ten days, and under favorable conditions will not prove fatal. The birds should, however, be separated from the rest, and the beaks and eyes carefully washed with warm water and then dried, and after which a mixture of laudanum and lead water is used for anointing the eyes. The mouth and tongue, in severe cases, should be cleaned. "Douglass mixture" should be used in the drinking water, and the birds should be fed sparingly on moist food. Exercise can be allowed, and some little green food.

WYANDOTS.

This new breed, formerly known as the Sea Brights, has so many good points to recommend them, both to the fancier and farmer, that they surely will become very popular. Their plumage is white, heavily laced with black, the tail alone being solid black; the lacing on the breast being peculiarly handsome. They have a small rose comb, close-fitting; face and ear-lobes bright red. Their legs are free from feathers and are of a rich, yellow color. In shape they bear more resemblance to the Dorkings than any other breed. Hens weigh 8 to 9 pounds, cocks 9 to 10 pounds, when full grown. They are very hardy, mature early, and are ready to market at any age. Their flesh is very fine flavored and close grained, which, with their yellow skin, model shape and fine, plump appearance, particularly adapts them for market. They are extraordinary layers, surprising

every breeder at the quantity of eggs they produce. If allowed to sit they make most careful mothers, are content anywhere, and will not attempt to fly over a fence four feet high. Their great beauty and good qualities will make for them a host of admirers where the breed is introduced.

HOW TO KEEP EGGS.

Eggs may be kept from late summer or autumn well into winter, or even spring, but it is next to impossible to deceive the dealers, and very few consumers are deceived by them. "Limed eggs" have their regular market quotations throughout the winter, and usually sell at one quarter to one-sixth less than fresh ones. They are limed by packing them into barrels or smaller casks, point down, and pouring on them the water from lime slacked with brine, to a thin milky consistency, using just enough to cover the eggs, so that the next layer can be conveniently placed upon these, and then more lime-water added. When the cask is full, the eggs must be covered with a cloth and this spread over thickly with the pasty lime, then, if the water evaporates, or if the pasty lime cakes and cracks, more water must be added. It is essential that the eggs should be perfectly fresh, clean, and sweet when packed, or the whole lot will go wrong. There is probably no better way of keeping eggs for market than this. For family use they may be greased, dipped in hot paraffine wax, scalded, and perhaps preserved in other ways. The lime and salt liquid imparts no flavor, and does not deface the egg, which, when offered for sale, has a slight chalky appearance foreign to and distinguishes it from a fresh laid egg.

RAISING CHICKENS.

Do not be in a hurry to invest in incubators, if you are a farmer, and have anything else to do besides looking after the poultry yard. The wooden incubators are well enough for men who have plenty of money, and make the raising of chickens a specialty. A good many things about incubators are not yet proved, and a farmer who has his bread to earn, can afford to wait a little longer, and use the original method for hatching and raising chickens. The hen is good for a dozen eggs, and, if left to her own selection of nest is pretty sure to hatch them if they are fertilized. You may protect her against vermin, but she covets privacy and desires to be left alone. When her brood is off she needs a little help, a coop for shelter, and regular feeding with a mixed diet of animal and vegetable food, and water or milk to drink—the latter if you can get it. Nothing is better than milk for the fowls. The young chicks will help, rather than hinder in the garden, until they are a month or six weeks old. They will destroy a multitude of insects, and thrive on them. The early hatched chickens are best for layers, but late summer is quite as good for broilers. They never come amiss at any time on the farm.

ATTEND TO THE NESTS.

While there are many poultry breeders, as well as farmers, who raise fowls in large numbers, who regularly clean out their fowl houses, removing and carefully housing the droppings thus obtained, the number of persons who pay the proper attention to the nests and nesting boxes is very limited. It seems that a majority of fowl raisers have an idea that a nest is good enough for a year's hard service, when

once properly made, no matter how many times a brood of young chicks has been hatched in it, or how many times laying hens have visited it on business. But it is an absolute necessity that nests are kept clean and well supplied with fresh hay, straw or other good nesting material, and all good poultry breeders recognize it as such. Those who complain of getting few eggs are usually the ones who do not supply their hens with plenty of good, and clean nests for them to lay their eggs in, leaving the fowl to find places to lay wherever they can. The result is, that only part of the eggs are found, the remainder going to sustain and fatten rats and other pests which are always found under and around farm buildings, especially old ones.

We have found that the best place to locate the nest, so as to afford always the surest preventive against the hens eating their eggs (as some kinds frequently will), is somewhere in the dark or in the darkest and most secluded part of the fowl-house. If the hen that is disposed to destroy her own eggs cannot see them after laying, she shortly gets cured of this habit. This is one advantage in the secretly arranged nest.

It is quite immaterial how the nest is thus darkened. A narrow covered passage leading to the nest, may be so arranged, so that the hens will have to pass through this to lay at the other end of it. Half-barrels or cracker-kegs may be laid on their sides, and turned towards a plank wall, leaving only room between the open end of the kegs or barrels, and the partition for the layer to creep into this retired spot. They will quickly get accustomed to any place thus prepared for their convenience, and will lay their eggs very regularly in such dark places. The very best kind of nests, however built, are secluded, retired, and quite dark in the interior.

MICHIGAN CENTRAL R. R.

MAIN LINE. GOING EAST.

Express, except Sundays	2 03 a m
" dally	6 03 a m
" "	1 25 p m
" "	5 58 p m
Mail to Buffalo direct, except Sundays	5 25 p m
Local to Fort Erie, except Sundays	4 00 p m

GOING WEST.

Express, except Sundays	8 05 a m
" dally	1 05 a m
" "	7 59 p m
" "	10 12 p m
Mail from Buffalo direct, except Sundays	7 35 a m
Local from Fort Erie	5 45 a m

NIAGARA DIVISION.

GOING NORTH.

	A M	A M	P M	P M
Buffalo	7 45	9 30	2 55	5 00
Black Rock	8 05	9 50	3 10	5 20
Fort Erie	8 15	10 00	3 20	5 30
Victoria	8 18	10 03	3 23	5 33
Niagara Junction	8 22	10 06	3 27	5 36
Black Creek	8 3	10 14	3 38	5 44
Chippawa	8 48	10 22	3 47	5 52
Montrose Junction	8 54	10 27	3 53	6 00
Falls View	8 50	10 30	3 55	6 07
Niagara Falls	9 02	10 23	3 58	6 05
Clifton	9 08	10 29	4 05	6 09
Queenston	9 23	10 54	4 27	6 24
Toronto	1 15	1 30	7 40	9 00

GOING SOUTH.

	A M	A M	P M	P M
Toronto	6 45	8 30	1 45	4 00
Niagara	9 55	11 21	5 35	6 50
Queenston	10 10	11 32	5 50	7 05
Clifton	10 30	11 47	6 10	7 17
Niagara Falls	10 36	11 53	6 16	7 23
Falls View	10 39	11 56	6 19	7 26
Montrose Junction	10 49	11 57	6 20	7 27
Chippawa	10 45	12 02	6 25	7 32
Black Creek	10 53	12 11	6 34	7 41
Niagara Junction	11 01	12 18	6 44	7 49
Victoria	11 05	12 21	6 49	7 54
Fort Erie	11 10	12 25	6 55	8 00
Black Rock	11 20	12 35	7 05	8 10
Buffalo	11 40	12 55	7 15	8 30

Through tickets to any point in the United States can be obtained at the Welland Depot, or of R. H. Dyer, Town Agent.

For rates, &c., for colonists moving west, apply as above, or to M. C. Ronch, Northern Passenger Agent, St. Thomas, or O. W. Ruggles, General Passenger Agent, Chicago, Ill.

Michigan Central Trains run on Chicago time which is one hour slower than Welland time.



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The money must accompany the subscription Remittances by P.O. Order or registered letter will be at our risk.

All communications, subscriptions and matters of business connected with this paper should be addressed to Canadian Farmer, Drawer A., Welland.

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Made known on application to this office.

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Patrons answering or in any way corresponding with those advertising in these columns will oblige us by saying they saw the advertisement in these columns.

THE GRANGE.

Brother Patrons are requested to contribute for this column, and to send their communications direct to the office of publication, Welland, Ont.

COLONEL BRIGHAM'S PICNIC ADDRESS.

At the Port Stanley picnic the first speaker was the well-known C. J. Brigham, ex-Senator of Ohio.

He began by alluding to the fraternal relations that had formerly existed between Canada and the United States, and to the fact that while the day was unfavorable to the picnic it was highly favorable to the crops and would therefore be a blessing to the farmers of the country. He spoke of the importance of agriculture, the foundation upon which every thing must rest, and instanced the condition of the harvests in the several years as guiding the operations of speculators and business men. He advocated the protection and careful fostering of agriculture, and asked who was to do this, claiming that for the accomplishment of this farmers themselves must do the work, and the question for farmers to consider was how they were to accomplish it. He maintained that by organization and by training children properly the interests of the farm could best be advanced. In union was strength and by uniting they could stand shoulder to shoulder, and carry forward their interests to success. In almost every business and profession there was organization, and he asked how could farmers cope with them without an

organization equally strong. He referred to the benefits accruing from organization in a financial, business and social sense, as shown in all professions, and especially in manufacturing industries. He said when man came to the world to meet with associations and schedules; they followed him through life and even when he passed to that bourne where all must answer on their record the funeral directors' organization followed him. Taking this in view then, he asked what farmers could do without organization of some sort. He depicted what would be the result when farmers met together, and asked where was the earthly power that could cope with the farmers when thoroughly organized, meeting together, discussing intelligently and knowing what to do. Farmers must organize and then they could have their proper place, gain their rights and protect themselves and the people from robbery even by any organized power. The manufacturers organized pools, not going by the law of supply or demand—they say pay us our price or go without our implements. If farmers would organize and say these prices are arbitrary they could reduce the price. If the farmers held out for a year or two these men would be glad to compromise. All wished to advance their prices and he had no doubt if the farmers here could do so they would advance the price of wheat (laughter) and all were apt to do this if they had the power. But farmers could not do this, and let them see to it that no other branch of organization could fix arbitrary prices. He reverted to the fact that farmers are producing the wealth of the country and if they cannot enjoy some of the fruits of it there is something wrong. He next directed attention to the question of taxation and expressed his belief that in Ontario as in Ohio the farmers bear more than their just proportion of the taxes. Farmers could not hide their broad acres, their cattle or sheep—they were visible, but he asked did the assessors find the whole of the property, and he showed him how the merchants and others escaped their just dues by hiding their property, evading the assessor, and reducing the valuation. He asked how farmers could protect themselves in this matter without meeting together to discuss the question and protect themselves. He spoke of the large public expenditure and corruption and said that the farmers were to blame for this, which showed the necessity of educating the farmers and their meeting together. There was need of a change in the representation, for all classes should be represented, and the overshadowing interest of agriculture was scarcely represented at all. The farmers should see to it that they were properly represented by men directly connected with agriculture, for if they did not protect themselves no one would. He reverted to the railway question, deprecating the discrimination and extortion practiced by the railway companies in dealing with farmers and the public, illustrating the robbery of the farmer as similar to the bees who, after gathering a stock of honey have it taken away by the bee-keeper, but are glad to have the hive and foundation left to them. He spoke of how in a good harvest the freight rates were advanced and how as long as there were no common interest, and no union amongst the farmers this extortion would continue. He asked who were to blame for this, and claimed that the legislature should regulate the prices, and if they did not do so others

should be put in their places who would do so. He believed railways are of the greatest blessing as long as they performed the duties for which they were constructed, but when they used their power for extortion the farmers must suffer. He maintained that when farmers were educated to understand their own interests they would march to the ballot armed with a freeman's greatest privilege, and by voting to protect the people could control even the giant railway corporations. He condemned the acceptance by representatives of passes or any favor from railway or other corporations. Just as long as the legislators went along with these favors they would vote against the farmers, and it must be stopped. He referred to the work of education and improvement that would be accomplished by meeting together, discussing matters, exercising intelligence and bringing farmers away from the hermit life that too many of them led. This would do all good—the old, the young, and give them a better knowledge, and enable them more successfully to battle with the struggle of life, and this could best be done in the organization—the Grange. The question was what kind of organization farmers should have. Farmers' clubs could do part of the work, but they must have something more powerful, that would reach further and have more control. The order of the patrons of husbandry would bring farmers together, educate themselves, and show them their true power. He alluded to the objection that it is a secret society, but showed how even in the home secrets were necessary. In the Grange all meet on social equality, and those who could not be admitted to the house could not be admitted to the Grange. There was another secret, that they could recognize a brother or sister wherever they went in whom they could place confidence, and these were the only two secrets in the organization that he knew of. It was the only national organization that could do any real good for the farmer. He invited all farmers to take hold and go to shore with them. They had no reason to be discouraged, they were doing right and their work would speed on. He asked them to take up this subject, and fully examine it and the conclusion would be that all farmers should connect themselves with the order. He spoke of those who sympathized with them but did not join the organization, and illustrated it by a humorous anecdote that provoked much laughter. He said if these stood back and allowed the Grange to fight their battle, they would soon blush for shame. It was a grand work and whether sooner or later victory must perch upon their banner. The address was enlivened by several interesting stories which were well received by the audience.

welcome. After partaking of lunch in a large, airy tent belonging to the institution, Mr. Mills and Prof. Brown in short addresses explained the objects and workings of the College. The remainder of the day was spent in examining the buildings and experimental plots, and the farm generally.

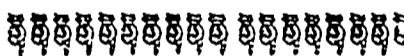
NOVA SCOTIA.

The Nova Scotia Division Grange meet, so Bro. E. S. Creed informs us, on the 3rd of July, and it is the intention of the brethren to hold a grand picnic on July 8th at Alexander, four miles from Ellershouse Station. Success to the brethren.

SANFIELD MILLS GRANGE.

ED. CANADIAN FARMER.—On the 5th of June there was organized by Bros. Slack and Morfat, of Willow Valley Grange, No. 702, Little Current P. O., a Grange at Sandfield Mills, to be called Manito Grange, with William Hare and John Robinson, master and secretary respectively. Notwithstanding that only two days notice of the meeting was given, a goodly number responded to the call, and we expect to receive many more on Saturday next, at our next meeting. It is also expected that this is only a beginning of the growth of our noble order on this island, as two more Granges are being talked of at present.

Our island is receiving quite an influx of settlers from the older counties this season, and to parties with small means, who are desirous of obtaining homes or lands of their own, I would say before going to the North-west, or deserting your own beloved Canada for a home in the neighboring states, come and see this section of our fair Dominion; but do not come expecting to find a garden of paradise, or you will be sadly disappointed. But for those who are willing to work as our fathers did in days gone by, there is homes and plenty. I would not advise those who have homes in the older counties, to dispose of them for to move to any new section. Let the aged fathers and mothers remain on the old homestead, while the young and robust seek for themselves homes, and in the search don't forget Manitoulin Island. J. R.



THE FARMER

FROM NOW TILL THE End of the Year FOR 50 CTS.

Send in your friend's half dollars and secure them the "Farmer" until January, 1885.

"HOW MUCH DOES A HORSE KNOW?"

That was the question I asked Professor Bartholomew, the successful horse-trainer, one afternoon, as I met him in the hall where he exhibited his educated horses. The question may sound like a vague one, but he answered it promptly enough.

"About as much as the average man—more than a great many. You don't believe it? Will you give me half an hour to prove it?"

"But," I objected, "you can teach a horse certain tricks, which become a mere matter of habit, and it proves nothing of the horse's knowledge."

The Professor smiled pleasantly. "I won't argue with you. Wait, Nellie!"

A slight scuffling followed in the stalls at one side of the stage, and a beautiful little bay mare came trotting up to where we stood. She stopped beside the Professor, and rubbed her head against his arm caressingly, gazing curiously at me the while.

"Bow to the gentleman. Now shake hands," the teacher continued, as she nodded her pretty head toward me, and then lifted her left forefoot.

"Is that the right foot?" asked the Professor, reprovingly.

One could actually see a look of confusion on her intelligent face as she quickly corrected her mistake.

"Nellie is like some children. She can't seem to distinguish between her right and left hand," said the Professor, patting her affectionately. "Now count one, two, three," he added. Tap, tap, tap went the iron shoe hoof on the stage. "Good!" said the Professor. "Now get the gentleman a chair."

I must confess I thought this was going a little too far. The tricks she had exhibited were ordinary enough; they displayed careful training; but this quiet request rather surprised me. I watched to see what she would do. She trotted over to the opposite side of the stage, and in a few moments returned, bringing a chair in her teeth.

"Here," said Professor Bartholomew, pointing to the place where he wanted me to sit. "Now," he said, "wait till I bring on the rest of my scholars;" and he crossed the stage, and put his hand on the swinging door which led to the stalls. Nellie started to follow him.

"Why don't you stay with the gentleman?" he said, quietly, without turning his head, just as one would speak to a child. Nellie turned obediently and came back to my side. I must confess that I felt rather embarrassed, and in my confusion hardly knew how to treat this little lady-horse. Suddenly I thought of some candy which I had in my pocket, and soon we were getting on rather finely, eating candy together.

In the meantime Professor Bartholomew had returned, followed by about a dozen horses, who marched solemnly on the stage, and ranged themselves along one side. Then came the exhibition.

It would be impossible to describe all the performances they went through; march and counter-marching, dancing in perfect time to Professor Bartholomew's whistle, lying down, kneeling, bowing, jumping—all at the quiet command of the teacher. In fact his voice was so low and gentle that it could hardly be called a command; it was more like a suggestion on his part, with which they complied readily.

One handsome Arabian attracted my at-

tention, and the Professor at once called him over to him.

"How do you do, Selim?" said the teacher.

The horse bowed.

"Is that the way you bow in Arabia?"

Selim at once dropped upon his knees, and touched his forehead to the floor. The Professor gave him the signal for getting up. Then turning to me, he said:

"That is an extremely difficult feat. For some reason a horse hates to do it."

"Does he understand what you say, I asked."

"Does he not act as if he did?" was the Professor's answer. Then he continued: "There is no doubt that the horses understand every word I say to them. I could see no reason why if a horse can comprehend the meaning of 'Whoa,' 'G'long,' 'Huddup,' he could not learn more, so I began to teach two or three, and soon had this school around me."

"I notice you speak in such a low tone, while so many who have to do with horses seem to think it necessary to yell at the top of their lungs."

"A horse is not deaf; his hearing is more acute than a man's, and yelling at him only tends to make him harder to manage. You can lay down as a certain rule that the louder a man shouts at a horse, the less he knows about horses. But then half the men who have charge of horses now should be made to practice ten years on a clothes horse before they are allowed to touch a live one."

"How do you manage to teach them so much?" I asked.

The Professor smiled. "Any one with patience can train horses, and almost any horse can be trained. The trouble is that most people have but very little patience, and a great many good horses are spoiled by half-witted owners who are not fit to have charge of a saw-horse."

But the scholars are becoming restive, and the Professor said, "school is dismissed." Each horse left his place, came to the Professor, and walked off the stage.

"Now how much does a horse know?" said the Professor, turning to me, and repeating my own question.

"A great deal more than some men, for he knows enough to do his duty cheerfully, and to the best of his ability," I answered, promptly, as I took my leave.—ALLAN FORMAN in *Harper's Young People*.

How He Wanted It.

A merchant traveller at dinner requested the waiter to bring him a piece of rare beef, and when it came, it was rare indeed.

"Waiter?" he remarked warningly, as he looked at the underdone dish.

"Yes, sah," responded the darkey.

"Take this beef out, please, and kill it."

The waiter crawled into a napkin ring and disappeared.

HIS HALF SON.

"Is this young man your son?" asked the judge of an old negro who had been arraigned before the court.

"He's my half son, sah."

"Half son? How do you make that?"

"His mudder wuz married fore I married her."

"Then he's your stepson?"

"No, sah, he ain't 'cause he wan't borned fur two years arter his mudder married me."

"Then he's your son."

The old fellow scratched his head for a moment and said:

"Don't de fac dat his mudder wuz a

married 'oman fore she eber seed me makedis boy my half son?"

"Of course not."

"Den he's my whole son, is he?"

"Yes."

"Come heah ter me, Silas, an let yer daddy fling his arm 'round yer. Been er busin' half o' dat boy all 'o his life. Come heah to yer daddy, sah."

A Dude's Presence of Mind.

"Yes," said Augustus McDude, "I was never so completely broken up in my life. I had got right into my seat at the opera before I found that I had clean forgotten my kids, and the swellest house of the season too, mind you. Just think of it."

"Heavens!" exclaimed his horrified companion: "what did you do—go home?"

"No, there was too big a jam to get out, so I just took out two silver dollars and held one in each hand all the evening. I thought the money would be the next best thing, you know, and it answered first rate."

And his fellow dudes sucked the heads of their canes in speechless admiration.

Vital Questions. !!!

Ask the most eminent physician
Of any school what is the best thing in the world for quieting and allaying all irritation of the nerves and curing all forms of nervous complaints, giving natural, childlike, refreshing sleep always?
And they will tell you unhesitatingly
"Some form of hops !!!"

CHAPTER I.

Ask any or all of the most eminent physicians.

"What is the best and only remedy that can be relied on to cure all diseases of the kidneys and urinary organs; such as Bright's disease, diabetes, retention, or inability to retain urine, and all the diseases and ailments peculiar to Women?"

"And they will tell you explicitly and emphatically, "*Buchu !!!*"

Ask the same physicians

"What is the most reliable and surest cure for all liver diseases or dyspepsia; constipation, indigestion, biliousness, malaria, fever, ague etc.," and they will tell you:

"*Mandarin or Drindion !!!!!!*"

Hence, when these remedies are combined with others equally valuable

And compounded into Hop Bitters, such a wonderful and mysterious curative power is developed, which is so varied in its operations that no disease or ill health can possibly exist or resist its power, and yet it is

Harmless for the most frail woman, weakest invalid or smallest child to use.

CHAPTER II.

"Patients almost dead or nearly dying"

100 years, and given up by physicians of Bright's and other kidney diseases, liver complaints, severe coughs, called consumption, have been cured.

Women gone nearly crazy !!!!!!

From agony of neuralgia, nervousness, wakefulness and various diseases peculiar to women.

People drawn out of shape from the excruciating pangs of rheumatism, inflammatory and chronic, or suffering from scrofula.

Erysipelas?
"Salt rheum, blood poisoning, dyspepsia, indigestion, and, in fact, almost all diseases trail"

Nature is heir to.
Have been cured by Hop Bitters, proof of which can be found in every neighborhood in the known world.

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

Remarkable Restoration.

Mrs A. O'Brien, 372 Exchange street, Buffalo, was supposed to be dying with consumption and abandoned by her physician. She suffered terribly and was reduced in flesh to ninety pounds. In this condition she restored to Burdock Blood Bitters, and now enjoys perfect health and weighs one hundred and forty-six. She will gladly answer enquiring sufferers on receipt of U. S. postage stamp.

CONSUMPTION CURED

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of consumption, bronchitis catarrh, asthma, and all throat and lung affections, also a positive and radical cure for nervous debility and all nervous complaints, after having tested its wonderful curative powers in thousands of cases, he felt it his duty to make it known to his suffering fellows. Actuated by this motive, and a desire to relieve human suffering, I will send free of charge to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Send by mail by addressing with stamp, naming this paper, W. A. Noyes, 149 Power's Block, Rochester, N. Y.

Good the Year Round.

At all seasons, when the system is feeble and the digestive powers feeble, or the liver and kidneys inactive, Burdock Blood Bitters are required.

Respect Old Age.

An old favorite is the remedy known as Dr. Fowler's Extract of Wild Strawberry. Thirty years reliable for cholera morbus diarrhoea and summer complaints.

No Such Word as Fall.

A failure to relieve or cure summer complaints can never be truthfully applied to Dr. Fowler's Extract of Wild Strawberry. All dealers sell it.

Great Negligence.

There is great neglect with most people to maintain a regular action of the bowels, which causes much disease. Burdock Blood Bitters cures constipation.

Unknown to Science.

That preparation is discovered which can surpass Dr. Fowler's Extract of Wild Strawberry as a cure for cholera morbus, dysentery and summer complaints.

Down in Dixie.

The wife of Mr. J. Kennedy, dealer in drugs in Dixie, was cured of a chronic cough by Haeyard's Pectoral Balsam. The best throat and lung healer known.

Much distress and sickness in children is caused by worms. Mother Graves' Worm Exterminator gives relief by removing the cause.

Robert Lubbeck, Cedar Rapids, writes: "I have used Dr. Thomas' Electric Oil both for myself and family for diphtheria, with the very best results. I regard it as the best remedy for this disease, and would use no other." When buying Dr. Thomas' Electric Oil, see that you get the genuine. Beware of imitations.

P. M. Markell, West Jeddore, N. S., writes: I wish to inform you of the wonderful qualities of Dr. Thomas' Electric Oil. I had a horse so lame that he could scarcely walk; the trouble was in the knee; and two or three applications completely cured him.

The best test of a human life is the amount of good it has been and does to others. Mrs. Lydia E. Pickham may be given a seat of honor among those who have helped to change sickness into health, and to transform the darkness of suffering into the sunshine of rest and hope.

Better than Diamonds.

and of greater value than fine gold is a great tonic and renovator like Kidney-Wort. It expels all poisonous humors from the blood, tones up the system and by acting directly on the most important organs of the body stimulates them to healthy action and restores health. It has effected many marvelous cures and for all kidney diseases and other kindred troubles it is an invaluable remedy.

The sort of blood from which the constituents of vigorous bone, brain and muscle are derived is not manufactured by a stomach which is bilious or weak. Uninterrupted, thorough digestion may be insured, the secretive activity of the liver restored, and the system efficiently nourished by the aid of Northrop & Lyman's Vegetable Discovery and Dyspeptic Cure. It is the greatest blood purifier ever introduced into Canada.

WHERE'S MY HAT?

The other day a wealthy society man, returning from a dinner party under the influence of liquor, slipped and fell on the sidewalk on Aurin avenue.

A kind hearted, but sober friend, helped the inebriate to his feet.

"Where's my hat?" asked the tipsy party, oblivious to the fact that the hat was on his head.

"Why don't you look for my lost hat?" he continued angrily to his sober friend, who laughed heartily. "Why don't you look for my hat? Has somebody stole it?"

"My dear boy, your hat is—"

"Look for my hat, I say. Do you hear me speak?" But just then he put his hand to his head, and discovered the hat. Looking very wise, the victim of dipsomania said:

"My friend, you're absent-minded, or else your's blind drunkish. You are so blind drunkish, you couldn't see my hat was on my head (hic) Winkish smacker and strong drinkish a ragin' hon, and who-over is desheived thereby goesh about sheeking whom he may devour. You'r blind drunkish, I say, couldn't see my hat wash on my head," and steadyng himself on the arm of his friend, the society man went on down the avenue.—Texas Siftings.

HOW SMALL ITEMS COUNT.

Five cents each morning—a mere trifle. Thirty-five cents per week—not much; yet it would buy coffee and sugar for a whole family; \$18.25 a year—and this invested in a savings bank at the end of a year, and the interest thereon at six per cent, compounded annually, would in twelve years amount to more than \$689—enough to buy a good farm in the West.

Five cents before each breakfast, dinner and supper; you'd hardly miss it, yet it is fifteen cents a day—\$1.05 cents a week—enough to buy a small library of books. Invest this as before, and in twenty years you have over \$5,000. Quite enough to buy a good house and lot.

Ten cents each morning—hardly worth a second thought; yet with it you can buy a paper of pins or a spool of thread. Seventy cents per week—it would buy several yards of muslin; \$16.50 in one year. Deposit this money as before, and you would have \$2,340 in twenty years—quite a snug little fortune.

Ten cents before each breakfast, dinner and supper—thirty cents a day. It would buy a book for the children; \$1.00 each week—more than enough to pay a year's subscription to a good newspaper; \$105.50 a year—with it you can buy a good melodeon, from which you could produce good music to pleasantly while the evening hours away. And this amount invested as before would in forty years produce the desirable amount of \$15,000.

GEMS.

Never punish your child for a fault to which you are addicted yourself.

Do not underrate your ability to achieve success in a noble undertaking till you have fully tested your powers of action and endurance.

Pluck is the main spring of human powers, and the one thing lacking to success where failure is written on many a well begun battle.

It will be very generally found that those who sneer habitually at human, and affect to despise it, are among its worst and least pleasant samples.

In the lottery of life there are more prizes drawn than blanks, and to one misfortune there are fifty advantages. Despondency is the most unprofitable feeling a man can indulge in.

The road to success is not to be run upon by seven-leagued boots. Step by step, little by little, bit by bit, that is the way to wealth, that is the way to wisdom, that is the way to glory. Pounds are the sons, not of pounds, but of peace.

I do not call reason that brutal reason which crushes with its weight what is holy and sacred; that malignant reason which delights in the errors it succeeds in discovering; that unfeeling and scornful reason which insults credulity.

Faith in a sublime truth, loyalty to a great purpose will make the faces of men shine like the sun, and their raiment white as the light. These true souls are the normal examples of our humanity; and we are but shapes and forms, and not men if we do not aspire to a life like theirs.

Indolence is a sort of second nature to many of us, which it takes a great deal of will power to uproot and supplant. Not being compelled by stress of circumstance to do a thing becomes with us sufficient reason why we should not do it until necessity becomes the only spur that can lead us on to action.

On the road of life one must not stop! In the book of life one leaf turned o'er! Like a red seal is the setting sun On the good and the evil men have done— Naught can to-day restore!

WHERE PAPA BANKED HIS MONEY.

"Mamma, what is that building?" "A bank building, dearie." "Is that where papa keeps his money?" "Yes dearie." "Mr. Faro keeps it, don't he, mamma?" "Why, no, dearie! What a question!" "Well, I heard papa say he'd left \$1,000 at Faro's bank Saturday night, anyway." "He did, did he?" [Aside] "Well, that's one safe deposit he's made, anyway! I know now why he refused me a new dress, new gloves and hat yesterday. Oh, but I'll make him regret the day he was born!" "What's the matter, mamma?" "Nothing, dearie, only I'm going to say a few words to your papa concerning Mr. Faro's bank!"—Ashmore Toothpick.

The practice of giving stock cold ice water in winter is a very wrong one. Water in winter for cattle should be pumped from a well and given to the stock as soon as pumped and before it has a chance to get cold. A non observance of this rule is why so many have poor stock in winter time, and have their flocks and herds continually losing flesh during the cold weather.

In the Diamond I yes more coloring is given than in any known Dyes, and they give faster and more brilliant colors. 10c. at all druggists. Wells, Richardson & Co., Burlington, Vt. Sample Card, 32 colors, and book of directions for 2c. stamp.

Mr. H. McCaw, Custom House, Toronto, writes. "My wife was troubled with dyspepsia and rheumatism for a long time; she tried many different medicines, but did not get any relief until she used Northrop & Lyman's Vegetable Discovery and Dyspeptic Cure. She has taken two bottles of it, and now finds herself in better health than she has been for years."

HARPER'S MAGAZINE.

The July Harper's will have no less than eleven full-page illustrations—an unexampled number. There are three striking Egyptian heads by Sir Frederick Leighton, P. R. A., portraits of Andrew Jackson, Daniel Webster, and of Prince Bismarck, the latter from a new photograph, the first since he became "bearded like the pard," for which the Chancellor courteously gave a sitting especially for the Magazine; a remarkable landscape—"The Last Land"—in which Mr. W. H. Gibson goes quite outside his usual manner, and presents a strong Rousseau-like effect; one of Dielman's charming pictures, illustrating "Nature's Serial Story"; a characteristic drawing by Abbey of Judith Shakespeare and her gentle cousin; a pleasant picture of "The Children's Hour" on the sea-shore, by Sandham; and a noteworthy view of New York City, as seen from the west shore of the Hudson with its picturesque foreground, from studies by Schell and Hogan. This is a portrait and picture gallery to which even the readers of Harper's have not been accustomed.

BEEES FOR SALE.

30 Colonies of Holy Land in Simplicity hives, metal corners, Langstroth frame; very strong. DR. SHAVER, Stratford P. O. Box #1.

GAIN Health and Happiness.

How? DO AS OTHERS HAVE DONE.

Are your Kidneys disordered? "Kidney Wort brought me from my grave, as it were, after I had been given up by 12 best doctors in Detroit." M. W. Doreaux, Mechanic, Lonia, Mich. Are your nerves weak? "Kidney Wort cured me from nervous weakness, &c., after I was not expected to live." Mrs. M. M. R. Goodwin, Ed. Christian, Toronto, Cleveland, O. Have you Bright's Disease? "Kidney Wort cured me when my water was just like chalk and then like blood." Frank Wilson, Peabody, Mass. Suffering from Diabetes? "Kidney Wort is the most successful remedy I have ever used. Gives almost immediate relief." Dr. Phillip C. Ballou, Monkton, Vt. Have you Liver Complaint? "Kidney Wort cured me of chronic Liver Disease after I prayed to die." Henry Ward, late Col. 6th Nat. Guard, N. Y. Is your Back lame and aching? "Kidney Wort (1 bottle) cured me when I was so lame I had to roll out of bed." C. M. Tallmager, Milwaukee, Wis. Have you Kidney Disease? "Kidney Wort made me sound in liver and kidneys after years of unsuccessful doctoring. Its worth \$10 a box." Sam'l Hodges, Williamstown, West Va. Are you Constipated? "Kidney Wort causes easy evacuations and cured me after 15 years use of other medicines." Nelson Fairchild, St. Albans, Vt. Have you Malaria? "Kidney Wort has done better than any other remedy I have ever used in my practice." Dr. R. K. Clark, South Hc. o, Vt. Are you Bilious? "Kidney Wort has done me more good than any other remedy I have ever taken." Mrs. J. T. Galloway, Elk Flat, Oregon. Are you tormented with Piles? "Kidney Wort permanently cured me of bleeding piles. Dr. W. C. Kluge recommended it to me." Geo. H. Horst, Cashier M. Bank, Myrtleport, Pa. Are you Rheumatism racked? "Kidney Wort cured me, after I was given up to die by physicians and I had suffered thirty years." Elizabeth Malcolm, West Bath, Maine. Ladies, are you suffering? "Kidney Wort cured me of peculiar troubles of several years standing. Many friends use and praise it." Mrs. H. Lamoreaux, Ide La Motte, Vt. If you would Banish Disease and gain Health, Take

KIDNEY-WORT THE BLOOD CLEANSER.

THE IS NOT FOLKHOOD OR GIBBERISH. IT IS FACT. GOLD WATER DIP. T. W. LAWFORD, Gen'l Agent, 206 E. Chasse St., Baltimore, Md.

J. W. BARTLETT, Lambeth, - - Ont. BREEDER OF DARK BRAHMAS.

Having bred this useful and beautiful variety, exclusively, for six years, I am now in a position to offer eggs from birds of great merit. My breeding hens for this year are composed as follows:— YARD No. 1.—Cock of ten pounds weight, perfect pea comb, solid black breast, and most excellent leg feathering, mated with four grand hens, which last season as pullets produced many prize winners. Eggs, \$2.00 per setting of 13.

YARD No. 2.—Cock from the yards of the justly celebrated breeder, Phileander Williams, of Taunton, Mass., U. S.; perfectly straight pea comb, low and heavily built, with good leg feathering; mated with four superb pullets, three of which have won red tickets, the other blue, all are low, heavily built birds, with a profusion of leg feathering and dusky pencilled. Eggs, \$2.00 per 13.

My stock took first prizes at all the leading shows last Fall, and at the show of the Poultry Association of Ontario, at Toronto this year, and in no instance has a bird from my yards entered the show pen without winning a prize. Last year 60 per cent. of the eggs from my birds hatched, and 25 per cent. of these won prizes.

Square dealing in the future as in the past CHICKS FOR SALE IN SEPTEMBER.



NORMAN'S ELECTRIC BELTS.

(ESTABLISHED 1871.) 4 Queen Street East, Toronto. Nervous debility, rheumatism, neuralgia, lumbago, lame back, liver, kidney and lung diseases, and all diseases of the nerves and want of circulation, are immediately relieved and permanently cured by using these appliances. Circulars and consultation free. OTTAWA, Sept 3, 1883. A. NORMAN, Esq: Dear Sir,—I have experienced considerable benefit from your Appliances. I feel stronger and better every day. Yours truly, R. E. HAINBURTON. PETERBOROUGH, Oct 15, 1883.

A. NORMAN, Esq: Dear Sir,—Soon after I commenced to use your Electric Appliances they opened my bowels, cured my cough and cold, relieved my head, and considerably relieved my catarrh in consequence. The discharges from my head and chest are now easy, and I feel altogether better. My digestion has improved, my stomach is less sour and windy, and I am less troubled with lascivious and vivid dreams. I had previously tried almost all the advertised patent medicines without deriving any good. Yours truly, J. G.

FARMERS!

—THE— "Canadian Stock-Raisers Journal," Published Monthly And handsomely illustrated with life-like engravings of representative Canadian stock, has met with such marked success and encouragement from the stockmen and farmers of the Dominion, and correspondence has come in so freely from every quarter that the publishers were compelled to enlarge it twice during the present year. It claims to have no superior in any of its departments of Stock-Raising; the Farm; the Dairy; Poultry; the Apiary; Horticulture, and the Home. Subscription price, \$1.00 per annum. To any person forwarding us 50c. we will send the "Journal" to and 1884. Contributors wanted—liberal pay. Specimen copy sent free. The Stock Journal Co.,



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IS A POSITIVE CURE
For all of those Painful Complaints and Weaknesses so common to our best FEMALE POPULATION.
It will cure entirely the worst form of Female Complaints, all Ovarian troubles, Inflammation and Ulceration, Falling and Displacements, and the consequent Spinal Weakness, and is particularly adapted to the Change of Life.
It will dissolve and expel Tumors from the Uterus in an early stage of development. The tendency to Cancerous Humors there is checked very speedily by its use.
It removes flatulency, destroys all craving for stimulants, and relieves weakness of the stomach. It cures bloating, headache, nervous prostration, general debility, depression and indigestion.
That feeling of bearing down, causing pain, weight and backache, is always permanently cured by its use.
It will at all times and under all circumstances act in harmony with the laws that govern the female system.
Its purpose is solely for the legitimate healing of disease and the relief of pain, and that it does all it claims to do, thousands of ladies can gladly testify.
For the cure of kidney complaints in either sex this remedy is unsurpassed.
LYDIA E. PINKHAM'S VEGETABLE COMPOUND is prepared at Lynn, Mass. Price \$1. Six bottles for \$5. Sold by all druggists. Sent by mail, postage paid, in form of Pills or Lozenges on receipt of price as above. Mrs. Pinkham's "Guide to Health" will be mailed free to any lady sending stamp. Letters confidentially answered.
No family should be without LYDIA E. PINKHAM'S LIVER PILLS. They cure Constipation, Biliousness and Torpidity of the Liver. 25 cents per box.

OAKLAND JERSEY STOCK FARM.

Young Bulls registered in the American Jersey Cattle Club Herd Register, for sale at from \$100.00 upward.

The Herd Embraces 100 ANIMALS,

With cows having well authenticated tests of from 14 lbs. to 27 lbs. 91 of butter in 7 days; also Mary Anno of St. Lambert, who made 67 lbs. 7 1/2 oz. of butter in 11 months and 4 days. The public are invited to inspect the stock. Farm, one quarter of a mile from Waterdown, Ont. N. G. T. R. Address, VALANCKY K. & H. H. FULLER, Hamilton P. O.

To Horse Owners.

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The Great French Veterinary Remedy

Prepared by J. E. GOMBAULT, ex-Veterinary Surgeon of the French Government Stud.

Has been in prominent use in the best Veterinary practice of Europe for the past Twenty Years.

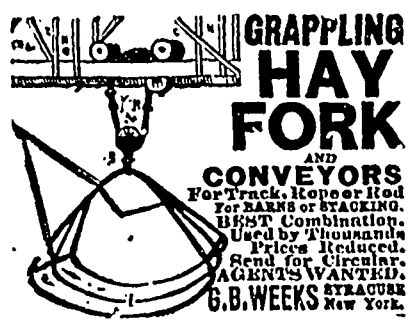
A Speedy, Positive and Safe Cure

For Curb, Splint, Swollen, Capped Hock, Strain of Tendons, Founder, Wind Pulls, all Skin Diseases or Parasites, Thrush, all Inflammation, all Throat Difficulties, all lameness from Spavin, Ringbone, and other bony tumors. Removes all Bunches or Blamishes, and many other diseases and ailments of Horses and Cattle. Far superior to a blister, or cauterization in its beneficial effects, never leaving a scar or blemish.

We Guarantee that one tablespoonful will produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made.

Every bottle of CAUSTIC BALSAM sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use.

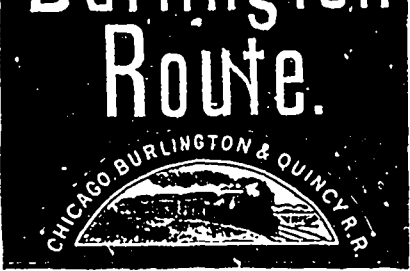
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List and entry forms can also be obtained from the Secretaries of all Agricultural and Horticultural Societies and Mechanics' Institutes in the Province. Entries close August 31st.

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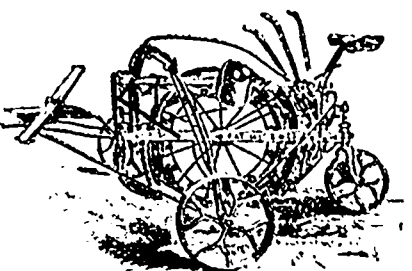
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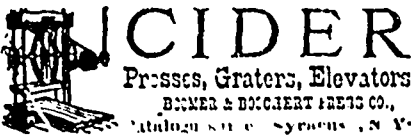
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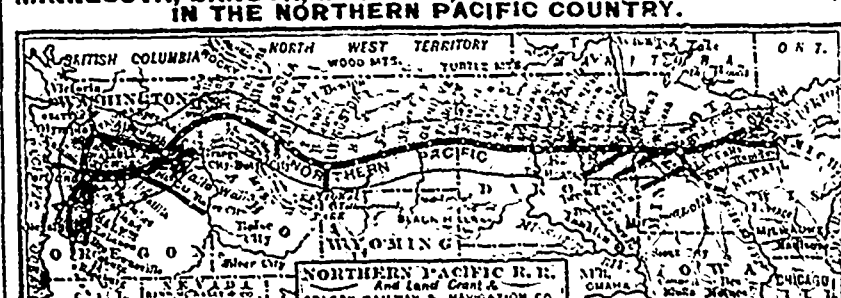
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FOR SALE, cheap, pure bred Black Spanish, also pure bred Plymouth Rock eggs in season. M. BLOPHEE Brantford, Ont.

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10 CENTS will pay for a two months trial subscription to the "CANADA CITIZEN," a live, handsome sixteen-page weekly Family Newspaper, pure and elevating, devoted to the interests of Temperance and Prohibition. Regular subscription, only ONE DOLLAR a Year. Address:—CITIZEN PUBLISHING CO. KING STREET EAST TORONTO.

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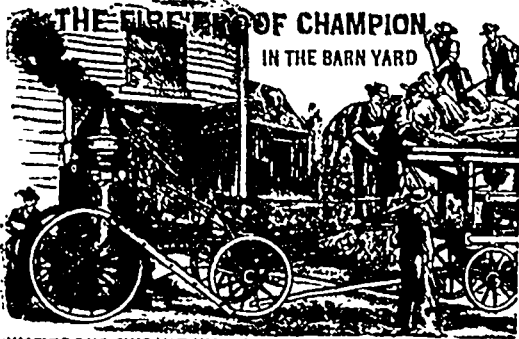
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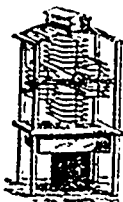
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Grey County—Proton Township.

2404—100 acres, of which 75 are cleared, balance hemlock, cedar, elm, etc.; 2 springs and a creek; fences rail. The dwelling is rough cast, containing 6 rooms; also an old log dwelling; barn is log, with frame granary 18x24; taxes \$8. Orchard 1/2 acre. School is 1/2 mile, the nearest P. O. is at Cedarville, 2 miles, and the Railroad is at Mount Forest. Price, \$2,800. 1/2 cash, balance to suit at 7 per cent.

Halton County—Nelson Township.

2279—A useful farm of 83 acres, 70 acres cleared, 60 free from stumps; good hardwood bush; soil clay loam; there is a spring and creek, and well at the dwelling; fences principally rail; dwelling is frame, on stone foundation, 20x30, 1 1/2 storeys, and contains 5 rooms, with kitchen 20x24, and an extra wing 18x30; also a small dwelling on the north corner of the lot; barn is frame, on stone foundation, 30x30, driving house and stable. Taxes \$13, with 3 days road work. Orchard, 2 acres, containing apples, pears and cherry trees, all bearing. School and Methodist church 2 1/2 yards distant; English and Presbyterian churches 4 miles. Zimmerman post office, 1/2 mile; Zimmerman railroad and telegraph offices on the N. & N. W. R. R., 2 miles; Milton 8 miles. Price \$3,000. \$1,000 cash, balance in 6 years, with interest at 7 per cent.

Muskoka District—Humphrey Township.

2447—A cheap farm of 100 acres, 30 cleared, 70 in bush, hardwood and pine; soil clay loam, rolling and easily worked. There is a spring and creek, well at house; well ditched, and fenced with rails. Frame dwelling on stone foundation 30x20, 1 1/2 storeys, 5 rooms; new frame barn 30x60, stone foundation. Taxes \$2, and 2 days road work; on gravel road, convenient to churches, school and P. O. at Ashdown, telegraph office at Rossan, 1 1/2 miles; buildings alone worth the money. Price, \$350; \$300 cash, balance in three years with interest at 7 per cent.

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2449—Good farm, 141 acres, 70 cleared and free from stumps, 30 in good hardwood bush; soil partly clay loam and partly sandy loam; spring and wells at the house; fences are principally rail; frame house on stone foundation, 16x20, 2 storeys, 20 rooms, cellar containing brick well 16x20, outside kitchen 14x20; wing 19x10, all in good repair; frame barn 50x60, cellar underneath on stone foundation with oak sills. Barn No. 2, 30x10 near which is a living stream. Taxes \$30 and 8 days road work; 3 orchards of 4 acres, containing 200 apple, 200 pear and cherry trees all bearing, gravel road 1/2 miles, school 2 1/2 miles. English and Baptist churches 3 miles, Presbyterian 1 1/2 miles, Methodist 5 miles, Rowan Hill post office 2 miles, telegraph office and market town at Post Rowan, 9 miles. Price \$7,000; half cash, balance in from 8 to 10 years at 7 per cent.

Oxford County—North Norwich Township.

2210—Fine stock, dairying, or grain farm of 215 acres; 180 cleared and free from stumps, 35 in bush, consisting of beech, maple, oak, elm, ash, etc. Soil is clay loam, gently rolling and easily worked; it is watered by a creek, 2 wells and cistern; well ditched, and fenced with rails, pie ets and boards; dwelling is frame, on stone foundation, roofed with shingles, 30x30, 1 1/2 storeys, with 7 rooms kitchen 30x18, and cellar 18x24—in good repair; 2 frame barns, each 30x20, on stone foundations; drive barn, frame, on stone foundation, 60x20, with basement stable, also cheese house, with apparatus. The orchard covers 5 acres, containing about 200 trees, including apples, pears, cherries, plums, peaches, also grapes and berries. There is a windmill on the place which supplies the house and barns with water. It is on a gravel road, 2 miles from school and within easy distance of churches, etc.; Springfield 4 miles, Norwich (on G. T. R.) 6 miles. Price \$12,000; \$6,000 cash and balance to suit with interest at 7 per cent.

Simcoe County—Innisfil Township.

2220—The "Big Bay Point Farm" contains 177 acres, 90 cleared, 25 free from stumps. There is a fine pine grove, the rest of the timber being beech, maple, butternut; the soil varies from clay loam to heavy clay; the farm has lake frontage, there is a well at the house, and 1/2 mile of ditching done. The dwelling is of frame on stone foundation, 2 wings, 20x33 and 22x22; 2 storeys and cellar, 10x20, and a kitchen 12x12. There is also a frame cottage on the place, 18x30; frame barn, 50x48, on stone foundation. There is also a log stable, 43x21; cow shed, 12x12; wagon shed, 12x8; hay shed, 60x18; stone root house, 30x14. Taxes, \$25, and nine days road work. Orchard of 1 1/2 acres, containing 100 trees of all varieties; the farm is 2 miles from gravel road on 1 1/2 miles from school. The English church is 7 1/2 miles, Methodist, 4 miles; Painswick P. O., Craig Vale R. R. and telegraph office 8 miles on the N. R. R., and Barrie 12 miles. Price, \$9,000, \$4,500 cash, balance in 4 years with interest at 6 1/2 per cent.

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2204—This very valuable property, known as the "Ridgerville Fruit Farm," containing 35 acres, all of which are cleared and 5 seeded down; fences are rail and picket; dwelling house is of frame, on stone foundation, roofed with shingles, 45x45, 2 storeys and 10 rooms, cellars underneath whole of house, 45x45; kitchen outside main building, 3x30—all in capital repair; barn is frame, 40x20, on stone foundation, with root cellar and cow stable underneath also fowl house, 30x15, ice house, 15x16; coach house and stables, 30x40, shed containing barn and stables, 45x20—all in good repair. Taxes amount to \$23 and 9 days road work, orchard contains 20 acres, with the following fruit, viz.: about 1,500 grape vines, 1,200 peach trees, 200 apples, 80 pears, 25 plums, and about a half-acre of strawberries and raspberries—all bearing; the farm is situated on the gravel road, school 1 1/2 miles away; churches of all denominations about 1 1/2 miles; post office, 60 feet, telegraph 1 1/2 miles; Welland, the railroad station and market, 6 miles, is situated on the Welland Railway. Price, \$8,500; \$3,000 cash, balance in 10 years, with interest at 6 per cent.

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