



# THE RURAL CANADIAN.

Vol. III. No. 5.

Toronto, May, 1884.

\$1 per annum, in advance

## SPECIAL OFFER.

To encourage settlement and cultivation of the Company's lands in the Red River Valley, all of the lands (not timbered) now owned by the

**ST. PAUL, MINNEAPOLIS**

—AND—

**MANITOBA RY. CO.**

IN THE COUNTIES OF

**NORMAN, POLK, MARSHALL**

**KITSON**, in Minnesota, outside of a five mile limit from the road.

will, during the year 1884, be sold to

3/4

**ACTUAL SETTLERS**

in lots of not less than 160 acres, nor more than 320 acres at the

**Low Price**

—OF—

**\$3 PER ACRE.**

The terms of payment will also be very liberal, only 50 CENTS an acre down, the balance in six annual payments at 7 per cent. interest. This offer will be open only between the 1st day of March and the 31st day of December, 1884.

First applicants will have their choice from the entire field without reserve.

**FIRST COME, FIRST SERVED.**

At these prices and terms, EVERY FARMER, EVERY FARMER'S SON, EVERY CLERK, EVERY MECHANIC, EVERY LABOURING MAN, can secure a home with the smallest possible outlay.

It presents the opportunity for every one to secure 160 acres of his own choice of land for only \$30 down and six annual payments of \$6.67 with interest.

It is the most liberal offer ever made by any Railroad Land Grant Company. The terms are better than can be obtained from the Government, and the lands included in the offer are the most productive of any unoccupied lands in the United States.

They are the cheapest lands, considering location and quality, in the United States, and every home seeker should take advantage of this offer without delay.

Write for Maps, general descriptive matter and other information, to

**J. B. POWER,**

Land and Immigration Commissioner,

**ST. PAUL, MINN.**

**25 BEAUTIFUL FANCY MIXED CARDS**

no two alike, with name, 10c.

**25 COMIC TRANSPARENT CARDS**

Agents wanted. Outfit of 50 fine samples, 10c.

**QUEEN CITY CARD HOUSE**  
150 YONGE STREET, TORONTO.

**NATIONAL PILLS** are a mild laxative, acting on the Stomach, Liver and Bowels, removing all obstructions.

THE LINE SELECTED BY THE U. S. GOV'T TO CARRY THE FAST MAIL



**GOING WEST.**

ONLY LINE RUNNING TWO THROUGH TRAINS DAILY FROM

**CHICAGO, PEORIA & ST. LOUIS,**

Through the Heart of the Continent by way of Pacific Junction or Omaha to

**DENVER,**

or via Kansas City and Atchison to Denver, connecting in Union Depots at Kansas City, Atchison, Omaha and Denver with through trains for

**SAN FRANCISCO,**

and all points in the Far West. Shortest Line to

**KANSAS CITY,**

And all points in the South-West.

**TOURISTS AND HEALTH-SEEKERS**

Should not forget the fact that Round Trip tickets at reduced rates can be purchased via this Great Through Line, to all the Health and Pleasure Resorts of the West and South-West, including the Mountains of COLORADO, the Valley of the Yosemite, the

**CITY OF MEXICO,**

and all points in the Mexican Republic.

**HOME-SEEKERS**

Should also remember that this line leads direct to the heart of the Government and Railroad Lands in Nebraska, Kansas, Texas, Colorado and Washington Territory.

It is known as the great THROUGH CAR LINE of America, and is universally admitted to be the Finest Equipped Railroad in the World for all classes of Travel.

Through Tickets via this line for sale at all Railroad Coupon Ticket Offices in the United States and Canada.

**T. J. POTTER,**

Vice-Pres. and Gen. Manager.

**PERCEVAL LOWELL,**

Gen. Pass. Ag't Chicago.

**JNO. Q. A. BEAN,** Gen. Eastern Ag't,

317 Broadway, New York, and

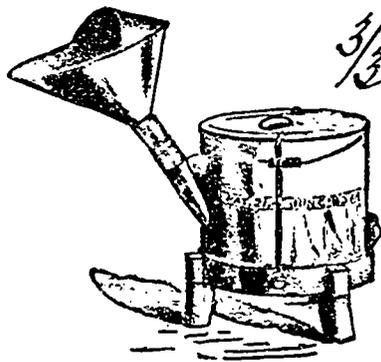
208 Washington St. Boston.

**RENNIE'S**  
SELECT  
Field, Garden  
AND  
Flower  
**SEEDS**  
ARE  
THE BEST  
THE HANDSOMEST  
AND MOST COMPLETE  
CATALOGUE 1884  
FREE TO ALL INTERESTED PURCHASERS.  
**WM. RENNIE, TORONTO.**

Land Transfer & Real Estate Agency.

Farms bought or exchanged for North-West land, and Dakota and Minnesota, etc. Business chances sold to the advantage. Commissions, Commercial, Law, and General, solicited. Information can be had by mail or personal application. 2 per cent. on all transactions.

**C. H. McDONALD,**  
No. 8 Bond St., Toronto, Ont.



**Combined Milk Bucket and Stool.**  
(DOMINION PATENT.)

This Milk Bucket and Stool is invaluable to farmers and all persons connected with the selling, buying, or handling of milk.

BY ITS USE—

The milk is kept pure and clean. It saves every drop of milk. It is convenient for milking, and does away with the old-fashioned stool.

Every Canadian farmer should have them and use them.

Manufactured by the

**"ONTARIO MILK BUCKET MFG CO."**  
159 Queen St. East Toronto.

Sold in every county of Ontario by special agents.



**Lamb Knitting Machine,**

The family favourite and standard manufacturing machine.

The LAMB KNITTING MACHINE makes all sizes of socks and stockings, cardigan jackets, shirts, drawers, combination suits, scarfs, cape mitts, and in fact anything a family would want. It is not a common circular machine making only one size. You can make any size, narrow and wide the same as in hand knitting. It is as far ahead of the common circular machine as the binder is ahead of the old cradle. It is always ready to do any kind of work. Is complete, simple, and everlasting; knits over twenty garments in ten different stitches. On receipt of \$1 we will send you one pair full fashioned ladies' stockings, narrowed on the back, and one pair ladies' mitts. You can then see the actual work of the most wonderful and perfect knitting machine ever invented. Send for catalogue and price list.

**J. M. STATTON,**  
Sole Agent for the Dominion,  
44 CHURCH STREET, TORONTO.

Freeman's Worm Powders are agreeable to take, and expel all kinds of worms from children or adults.



— THE —  
**Model Washer and Bleacher**

ONLY WEIGHS 6 LBS.  
Can be carried in a small valise.

SATISFACTION GUARANTEED OR MONEY REFUNDED

**\$1,000 REWARD** FOR ITS SUPERIOR Washing made light and easy. The clothes have that pure whiteness which no other mode of washing can produce. No rubbing required—no friction to injure the fabric. A ten-year-old girl can do the washing as well as an older person. To place it in every household, the price has been reduced to \$2.50, and if not found satisfactory, money refunded within one month from date of purchase.

See what *The Baptist* says: "From personal examination of its construction and experience in its use we commend it as a simple, sensible, scientific and successful machine, which succeeds in doing its work admirably. The price, \$2.50, places it within the reach of all. It is a time and labour-saving machine, is substantial and enduring, and is cheap. From trial in the household we can testify to its excellence."

See what the *Canada Presbyterian* says about it: "The Model Washer and Bleacher which Mr. C. W. Dennis offers to the public has many and valuable advantages. It is a time and labour-saving machine, is substantial and enduring, and is very cheap. From trial in the household we can testify to its excellence."

Send for circulars. Agents wanted.

**C. W. DENNIS,**  
**TORONTO BARGAIN HOUSE,**  
213 Yonge Street, Toronto.

Please mention this paper.

**Golden Hours**  
FOR THE YOUNG.

A BEAUTIFULLY ILLUSTRATED  
NON-DENOMINATIONAL  
**Sunday School Paper,**  
PUBLISHED MONTHLY.

TERMS FOR THE CURRENT YEAR:

4 Copies to one address	\$1.00
10 "	2.00
20 "	3.00
50 "	7.50
100 "	12.00

Any number exceeding one hundred at same rate.

It is sure to be a great favourite with the children of

**CANADIAN SABBATH SCHOOLS**

**C. BLACKETT ROBINSON,**  
No. 6 York Street Toronto.

FOR BLENDED SEND FOR CIRCULARS  
PETER R. L. & CO.,  
Toronto.

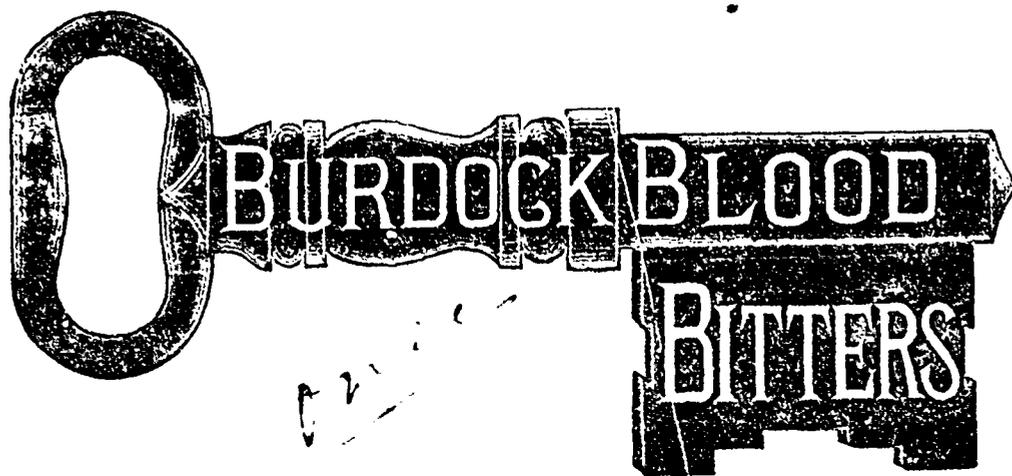
**VIRGINIA PAIN EXPELLER.** Climate mild—taxes low—health perfect. Schools and Churches convenient. Send for Catalogue. C. D. Eves & Ottawa, C. B. Va.

**A COMMON SENSE THEORY.**

Regarding the treatment of Chronic Disease.

The Brain is the great Electro-Motor power of the body, sending out its multitude of wires in the shape of Nerves to operate on all the organs of vitality to keep the organs in action and to stimulate the pulse to beat, the heart to throb and the vital current to flow. The heart is the grand organ of circulation, a double force pump to supply a perfect distribution of the blood. The Liver secretes bile, nature's true cathartic, and likewise filters the blood of its impurities. The Stomach is the grand central receptacle of nature's fuel, food. The Lungs are the bellows of nature to fan the vital spark to a brighter, purer flame; they oxydize and purify the blood, giving it vital vigor from the air we breathe. The Bowels, the Skin, and the Kidneys are the sluiceways or escape safety valves of nature to carry off morbid and effete matter from the system. This constitutes the great mechanism of life. If the Liver fails in its office, the blood becomes clogged with impurities, the Bowels cease their proper action, other organs become overtaxed, perverted or debilitated, and serious illness ensues. By errors in diet, or mode of living, the various functions become impaired, and often require correcting or gently stimulating to aid and right them in their work. The blood is veritably the life; without it in its purity there can be no health. Cleanse the fountain and the tributary streams will flow freely and purely. Keep the Lungs filled with pure air. Support the stomach with simple, plain, easily digested and nourishing food. Keep the Brain actively and cheerfully engaged in pleasing thought, cultivating a healthy moral tone of mind. Keep the Bowels regular, by a proper action of the Liver. Keep the Skin clean and the Kidneys free to carry off impurities that accumulate. Keep the circulation equalized by bathing, exercise, and gentle but natural stimulation, and sickness will be a stranger to your home. Burdock Blood Bitters, Nature's grand Restorative, Renovator, Blood Purifier, Liver, and Kidney Regulator and Matchless Tonic, will act directly in harmony with nature's laws. It is a safe and purely vegetable compound that acts at once and at the same time on the great outlets of disease, the Bowels, the Kidneys and the Skin, by regulating and stimulating the secretions to a healthy action, while hand in hand with the purifying process comes the Invigorating Tonic influence. It purifies the blood from all humors, from a common pimple to a scrofulous sore of years' duration. It regulates the Liver, acts powerfully on the Kidneys, stimulates the absorbents, and the organs of secretion, and is the great health restoring Tonic for Female Weakness, and all forms of Nervous and General Debility, and all those Chronic Maladies that tend towards a Consumptive or Scrofulous condition. Thus it is no highly vaunted Cure All—but simply acts in harmony with Nature by unerring common-sense principles. For abundant proof of our claim, we refer to our numerous voluntary testimonials that its constantly increasing popularity are bringing forth, which we cheerfully supply on application. Among other remarkable cures may be mentioned—Scrofula, Liver Complaint, Dyspepsia, Dropsy, Rheumatism, Kidney Complaints, Biliousness, Chronic Headaches, Chronic Sores and Blood Humors, and Nervous and General Debility. When others who despaired were cured, why may it not cure you?

**THE KEY TO HEALTH.**



Unlocks all the clogged avenues of the Bowels, Kidneys, and Liver, carrying off gradually without weakening the system, all the impurities and foul humors of the secretions, at the same time Correcting Acidity of the Stomach, curing Biliousness, Dyspepsia, Headaches, Dizziness, Heartburn, Constipation, Dryness of the Skin, Dropsy, Dimness of Vision, Jaundice, Salt Rheum, Erysipelas, Scrofula, Fluttering of the Heart, Nervousness, and General Debility; all these and many other similar complaints yield to the happy influence of

**BURDOCK BLOOD BITTERS.**

**BURDOCK BLOOD BITTERS**

CURES

**DYSPEPSIA.**

Read the following:

T. MILBURN & Co., Toronto:

DEAR SIRS,—I had suffered for fifteen years with Dyspepsia, and tried with almost every known remedy to effect a cure, but without success. Last summer I grew so bad that I had giving up all hopes of living, when a friend persuaded me to send to J. E. Kennedy's drug store, in Cobourg, and procure a bottle of Burdock Blood Bitters. I did so, and the third day after I commenced using it, I began to feel better, and before I had finished the first bottle I was able to be up and around at work, and after taking three bottles I was completely cured, and am now in better health than I had been for twenty-years.

Before using your Bitters I would not have given ten cents for my chance of living, and now I am in the best of health, and you have my permission to publish this that others, suffering as I was, may read and be benefited.

A. Burns, Blacksmith, 74

Kingston Road, 3 1/2 miles east of Cobourg, January 11, 1893.

The above is but one of many voluntary testimonials constantly being received regarding the cure of dyspepsia.

Each Bottle Contains 100 DOSES.

**Burdock Blood Bitters**

CURES

**CONSTIPATION.**

A TREE that bore forbidden fruit, so the story goes, brought pain and death into the world and all of mortal woes. There stood a tree of life and death within a garden fair, and pain and sorrow never came till Satan entered there, and tempted Eve and Adam to eat of forbidden fruit, and from the seed more evil trees have grown and taken root. The sins of our first parents upon us their children fall, there's Scrofula and Blood Impure we cannot name them all. The poison Upsas tree, Consumption, is deep-rooted far and wide, and from many dire diseases have the sons of Adam died. Is there no balm in Gilead? no antidote at hand to heal a poisoned nation?

Yes—we have one at command. The trees of life are living still for the invalid's salvation.

We are told "the leaves shall be for the healing of the nation." Around us near on every hand Some humble herb is found.

On trees—barks, roots and berries, of rare healing worth abound. The little plant which we despise, called burdock, is a cure for Scrofula and Humors foul, and blood that is impure, and when in Burdock Blood Bitters, with many a root and bark, it makes a shot against disease that always hits the mark.

**BURDOCK BLOOD BITTERS, A PURELY VEGETABLE EXTRACT, CURES ALL DISEASES OF THE**

**BLOOD, LIVER AND KIDNEYS.**

**T. Milburn & Co., PROPRIETORS, TORONTO.**

**A SINGULARLY PREVALENT DISEASE**

COMMON IN THIS COUNTRY

Stealthily, like a midnight robber, it approaches us unobserved, until ready to plunder our treasury. Those attacked have often wandering pains about the chest and sides, aching back, weary limbs. The mouth a bad taste in the morning, a sticky thick slime gathering about the teeth. They feel dull and sleepy during the day. The appetite is poor. There is a feeling like a heavy load on the stomach, though sometimes a faint, sinking "all gone" feeling at the pit of the stomach, which food does not relieve. The hands and feet are cold and clammy, and the eyes hollow and sunken, with dark circles under them. Often a dimness of sight or blurr, as if specks were floating before the eye; or they may become red, weak and watery. After a time a cough sets in, dry at first, but in a few weeks or months it is attended with a greenish-coloured expectoration. Sleep does not refresh, and the patient feels tired all the while; soon becoming nervous, irritable, and gloomy, fearing imaginary evils. There is a dizziness or a whirling sensation in the head when rising suddenly. The bowels become costive, the skin dry, and at times hot, the blood circulates badly, becomes thick and stagnant, frequently a spitting up of food, sometimes with sour taste, sometimes bitter and sometimes sweet. This is often attended by palpitation or fluttering of the heart, and general prostration and weariness. Many or all of these diseases are in turn present.

It is believed that nearly one-third of the people of this country are afflicted with this disease, and have some of the above signs of its presence in some of its varied forms. Learned and skilled medical men have mistaken the nature of this disease. Some have treated it for liver complaint, some for dyspepsia, others for kidney disease, and some for consumption, but under whatever name treated, none of the various modes of treatment have been at all times successful.

It has been found, demonstrated and proved, however, that the Great System Renovating, Blood Purifying Tonic, known as Burdock Blood Bitters, will, if taken in time, effect a perfect cure. It opens the culverts and sluiceways of the system to carry off all impurities, and opens the channels of health to supply pure and nourishing blood, regulating every organ to healthy action, while it gives strength and vigor to the enfeebled frame.

T. MILBURN & Co.

GENTLEMEN,—Your Burdock Blood Bitters out sells all other Blood Bitters or Blood Purifiers that I keep for sale, and I keep nearly all the blood medicines made in Canada and the United States. I also hear my customers say that it has effected a cure when other medicines have failed. Yours respectfully, J. F. Belfry, chemist and druggist, Shelburne.

"Burdock Blood Bitters sell well and seem to give more general satisfaction than any Blood Purifier we keep." Thus writes S. Perrin, druggist, Lindsay.

I have great pleasure in stating that I have never sold a remedy that has given such entire satisfaction as your "Burdock Blood Bitters." I sell more of it than any other dollar preparation, and have as yet not heard of a single instance where the result has not been entirely satisfactory.

I remain, yours truly, J. MCGARVIN, Acton, Ont.

N.B.—The above are brief samples of hundreds of testimonials from druggists and dealers all over the land. They speak with united opinion regarding Burdock Blood Bitters.

**BURDOCK BLOOD BITTERS**

CURES

**SCROFULA.**

Fact Stranger than Fiction.

FRANKVILLE, April 21, 1882.

Messrs. T. MILBURN & Co:

GENTLEMEN,—In November last, I was taken down and had to quit my business and go to bed. My trouble seemed to be in my liver and kidneys. This condition came upon me gradually, and I ran so low that my life was despaired of. I lay at one time 10 days without an operation of the bowels, and at another time 13 days. My urine was thick, and clouded, and sedimentary. At this time I commenced taking your Burdock Blood Bitters, and when I had taken one bottle I was able to move about the house and go for a drive occasionally. I have now, after taking four bottles, almost completely recovered, and feel that I am a better man than I have been for twenty years past. I attribute this condition of things to your medicine, and it gives me pleasure to say so.

Yours truly,

W. A. EDGERS.

Abundant proofs of the merit of this medicine from parties who have been cured sent to any applicant.

Each Bottle Contains 100 DOSES.



Vol. III. No. 5.

Toronto, May, 1884.

\$1 per annum, in advance.

**RURAL NOTES.**

ANOTHER light crop of peaches is in prospect in the Niagara district. The intense cold of the past winter, together with a local ice-storm, appear to have destroyed the fruit buds.

THE codling moth is of an ash-colour, with a copper-coloured spot on the end of each wing, and flies with body perpendicular. It is the worst enemy of the apple, and ought to be killed at sight.

EVERY farmer should be able to do his own grafting. All that is required is, to cut the cleft smoothly and to bind the graft in the safe-wood with grafting wax so as to exclude the air; nature will do the rest.

A LIGHT harrowing, followed by heavy rolling, is one of the best treatments that can be given to fall wheat at this time of the year; and it is all the more desirable in a season that plants are thin on the ground.

THE correspondent of an exchange tells farmers how to use dynamite for blowing up stumps and trees. It seems to us, however, that the farmer's best use of so dangerous an explosive is to have nothing to do with it.

SOUR milk, whey and buttermilk are good liquids for mixing with the soft food of poultry; but, then, almost everything that has a material existence is acceptable food for poultry. The hog himself is not more omnivorous and hence the absurdity of putting fowls on any particular diet.

THE tendency of early pruning is to throw the tree into producing fruit rather than wood, but it is better to delay the lopping off of large branches until the flow of sap slackens, which is usually late in May. Fall pruning promotes the growth of wood, while spring pruning favours fruit-bearing.

It is very poor economy to pay a farm hand good wages and give him poor tools or a poor team to work with. Another of the mistakes of farmers is to keep as help men guilty of impure conversation, especially if they associate with the family. Such men should be discharged at once, no matter how efficient they may be.

WHEN one reflects on how much of sustenance for the farmer and his family is raised

in the garden, one cannot but wonder that so little attention is paid to garden culture. Instead of giving to it a superficial attention at odd moments, or after all the field crops have been planted, the garden should be every farmer's first and principal care.

CAT-POLES are often difficult to drain, and the stagnant water lying in them during the summer is a fruitful source of fevers. A good way to neutralize the malaria of such places is to plant them with willows, or any other variety of tree that thrives in wet ground, as they act like pumps or drains by exhaling moisture through their leaves. The Australian eucalyptus is now largely used for this purpose.

THE advocates of Graham bread have not all the reason, or the argument, or the science of the question on their side; for one of the best chemists in Germany, Dr. Max Reubner, states that, independent of its better taste, the white bread is more economical than the black, because a larger portion of it is digested. That is to say, a smaller quantity of the white bread is needed against a larger quantity of black to satisfy the demands of the body.

To such an extent is the manufacture of bogus butter carried on in the cities of New York and Brooklyn that many farmers in New York State are said to have gone out of the manufacture of the honest article. A committee of the State Senate has been enquiring into the matter, and they estimate that the yearly consumption of bogus butter is 40,000,000 pounds, which is about half the quantity consumed in the entire State. One of the worst results of this industry is that it is destroying the export demand.

It is doubtful if any other part of the continent is so favourable for dairy farming as our own Province. In many of the American States the making season for butter and cheese is longer, that is to say, it opens earlier and closes later; but then drouth frequently prevails for a considerable portion of the season, and the failure of pastures results in a corresponding failure of the milk supply. In Ontario, on the other hand, dried-up pastures are the exception, as, owing to our peninsular position the rainfall is more evenly distributed.

REPORTS of the fall wheat are generally

favourable. It has come out of winter quarters in a very healthy state, although somewhat thin on the ground, and April weather does not appear to have done the plant any serious harm. There was some hard frost in the first half of the month, but the cloudy days reduced the danger from this source to a minimum. It is only when frosty nights are followed by bright, sunshiny days that much harm is done. Still it is yet too early to predict anything with certainty of the wheat crop of the year.

ABOUT one-third of the fall wheat of the United States is grown in Ohio, Indiana and Illinois, and in these three States, as well as in Ontario, the crop was a failure last year. The average yield per acre was slightly in favour of the Province; but in the previous year, when the crop was a bountiful one there as well as here, the Province led by nearly ten bushels per acre. The averages of spring wheat, barley and oats were higher in the Province for both years also, and we have no doubt whatever that for a series of years we will be found to stand first. These are facts that our farmers should ponder over, and that should make them more appreciative of the advantages they possess.

IT rarely happens that we are visited with cyclones in Ontario, but in the Western States they are of almost daily occurrence during the summer season—sweeping over localities of limited area and destroying everything in their way. It is difficult to account for the frequency of the cyclone out west, but the cooling areas of the Rocky Mountains and the heated areas of the desert region have probably something to do with it. A wind, as every student of natural philosophy knows, is caused by the air of a warm region rising and the cold air of some more or less distant region rushing in to supply its place; and if the air moves from two or three directions to a common centre at the same time a cyclone is often created. In our North-West territories cyclones are rarely heard of, and it is worthy of note in connection with the theory suggested above that the great American desert does not extend into Canadian territory. This is one more reason why the Ontario farmer should remain where he is, or, if bound to migrate, that he should prefer a prairie region where cyclones are unknown to one where they are as common as the "cronk" of the wild goose.

## FARM AND FIELD.

### HINTS ABOUT TURNIP RAISING.

There is no late or second crop that can be more easily grown, or more quickly brought to maturity, than one of the strap-leaved varieties of turnips. And on almost any place where vegetables are grown can be found at this season a piece of land where this crop can be conveniently grown. The turnip crop is often considered a coarse and common one, but we learn to appreciate it when it cannot readily be obtained, as was shown by the high rates paid for the almost worthless foreign turnips which were imported the past winter.

If it is intended to raise turnips largely, and do the work of cultivating by horsepower, the sowing should always be done with that end in view, as in a field where such a crop is grown there can be no greater mistake than that of having the rows too close together, thus preventing horse cultivation.

In the cultivation of all root crops the soil should be fine, smooth and rich, the latter being highly essential to the production of fine roots. The land should also be as free from weeds and weed-seeds as possible. A noted onion-grower said, a few years since, that he who plants onions on weedy ground will repent it all summer on his hands and knees; and the same is true in a measure of turnip culture. Turnip-growers who besire the best results prefer to have the soil for this crop prepared a few weeks or months ahead, in order to have it thoroughly settled. They are sometimes grown as a second crop to follow peas without ploughing the soil afresh. If the soil be dry, a good degree of firmness can be given to it by rolling it; but wet land should never be rolled.

If the manure be fine and can be applied liberally, it may be spread broad-cast and very lightly ploughed in, or harrowed in with a heavy harrow; or, if preferred, furrows can be opened at the proper distances, and the manure spread therein and covered. This plan is more economical of the manure. If commercial fertilizers are applied it is best to put them as close to the seed as they can be placed without doing injury, but they should be somewhat incorporated with the soil in order to have them in the best shape for plant-food. Good wood-ashes are a most excellent fertilizer for turnips, and this is one reason why they do so well on new land that has been burnt over. Potash, superphosphate of lime, and Peruvian guano are also excellent fertilizers.

When land is abundant or rough, the rows may be three feet apart; but horse cultivation can be done when the rows are as close as two feet. A mistake is sometimes made in "ridging" up the rows of turnips, a practice which, on dry soils, is often detrimental to their growth. The rows should be as nearly straight as possible, to allow the cultivator to run evenly and close to the rows, thereby saving time in hoeing. Plenty of seed should be used, as it insures evenness of plants in the rows, which is not so likely to be obtained when it is sown sparingly. Turnip-seed can be sown very satisfactorily with the seed-drill, as its round shape causes it to distribute freely. As soon as the plants

appear, attention should be given to the weeds. Nowhere in horticultural operations is "a stitch in time saves nine" so true. If weeds are attended to in season, it not only saves much time and labour in removing them, but the young plants are left undisturbed. To insure a good crop, the soil should be kept mellow and free from weeds throughout the season.

Thinning should be done as soon as the plants become strong enough to endure the operation. When the thinning requires considerable labour, it may be done to a great extent with a hoe narrow enough to keep the turnips the proper distance apart by striking out the turnips in bunches, so that those which remain may be thinned by hand. The amount of thinning necessary will depend considerably on the strength of the land, rich soil requiring a greater distance between the roots than poor soil. Should the turnip-fly become troublesome, the plants should be dusted with air-slacked lime or soot; but these do not usually do much danger after the plants attain their second leaves.

### HOW CONTRACTS ARE MADE.

To make an agreement binding, one party must make an offer, and the other accept it. It takes two to make a bargain. The parties must be of the same mind at the same time. A man asks a dealer what the price of an article is; the dealer answers, giving the price, the buyer says he will take it. There is no contract here unless the dealer agrees to sell it. When a man makes an offer and another accepts it, the second must let the first know that he accepts it. If a man agrees to guarantee that another will pay for what he purchases those who trust the party on the faith of the guaranty must notify the person who made it, or he will not be bound.

Again, if one offers to pay one hundred dollars for a horse, the seller to accept within twenty-four hours, the proposer is not bound unless the other does accept within that time. More than this, one who makes an offer can withdraw it at any time before it is accepted.

The offer must be accepted as it is made. If a seller offers ten barrels of flour at six dollars a barrel, he is not bound to sell five barrels at that rate. When land is offered for sale and the buyer offers to take it if the title proves to be good, the buyer has not made a contract that will bind the seller.

A contract that is made in sport or as a mere matter of form, is not binding.

If a man makes a promissory note while showing another how well he can write, the note is not binding upon him, unless it has been sold to some person who knew nothing about it and paid for it.

A man who is embarrassed in business gives a bill of sale of his property to a friend, so as to cheat his creditors. No contract exists and the creditors can hold the property. But the person in whose favour the bill of sale is made out can hold the goods against the fraudulent debtor.

Another case of this kind is often seen in newspaper articles. We read that a lady and gentleman go through the marriage ceremony at a public entertainment to amuse their friends, and afterwards find that they are really married. This is not true. The mar-

riage contract is no more binding than any other contract unless it is made and intended seriously, not in sport.

The contract must be made freely and not under compulsion. If a robber holds a pistol at a traveller's head, and threatens to shoot him unless he gives a note for a sum of money, the note thus obtained is worthless. Again, a landlord takes a boarder's wedding suit from him on the day the latter is to be married, and refuses to give it up until a note is given for board due. The landlord cannot enforce the payment of a note so given.

False statements made by either party will make a contract worthless. If a person buys land, the seller saying there are twenty-five acres in the plot, the buyer may refuse to accept it if there are in fact only twenty-three acres.

### WHAT LANDS NEED DRAINAGE?

Loose, porous soils, underlaid by sand or gravel, are drained by nature; but all land that is underlaid by clay, rock or other impervious material needs draining. What is to be gained by underdrainage? The surface of the water in the soil is lowered. The roots of the cereals and grasses may penetrate as far as the surface of the water, but never into it. It is necessary to draw the water off to such a depth as will give the roots of growing crops plenty of room to reach downward for that nourishment that is necessary to their growth. If the water is only one foot from the surface, the roots of the plants have only that amount of soil from which to gather nourishment, with the disadvantage of having their feet wet by capillary attraction. Only aquatic plants grow well with their feet in the water. The lowering of the water below the surface prevents a large amount of evaporation and its effect in cooling the soil. The water being removed, air and warmth are admitted to the soil. Drained lands are for this reason ready for planting at least one week earlier in the spring. The growth of the crops is quickened through the summer by the increased temperature of the soil, which amounts to several degrees, and the injurious effects of early frosts are prevented in the same manner. Crops are, therefore, given an increased period in which to make their growth of at least two weeks.—*Exchange.*

### MORTGAGED FARMS.

The idea of mortgaging a farm has been written up, by eloquent pens, both in prose and poetry, and the lessons usually tend to make a young man think that a mortgage invariably precedes the poorhouse, while this is only occasionally the fact. There have been many cases where industrious young men have bought farms and only paid part of the price, giving a mortgage to secure notes for the remainder; and they have gone on economizing, paying off the debt as fast as possible, and finally in a few years had their farms clear of debt.

The kind of mortgage which ruins the farmer is to pay debts incurred for some luxury, or to raise money to buy something for the family to keep up appearances with their more wealthy neighbours.

If a young man goes on a farm—a good farm—and determines that he will live within

his means, expend nothing for unnecessary luxuries until the farm is free, but make the farm more and more valuable year by year, there is no danger of the mortgage's landing him in the poor-house; for if he finds himself unable to meet his payments he can usually sell a farm which if not run down but is in good condition, for enough to save himself and to repay him for his labour. It may sometimes be the very best thing a young man can do to get in debt for a farm, if he wishes to pursue agriculture; and if he does thus go in debt, of course he must give mortgage for security. Very few young men get ahead any on renting farms; but thousands of men have gone in debt for farms, and worked but little harder than they would be obliged to on a rented farm, and soon owned a home for themselves and families.

### SOIL FOR POTATOES.

The potato, says Peter Henderson, like all other robust-growing vegetable, can be grown with varying success on soils of all kinds and in all conditions of fertility, but the soil best suited to it is a sandy loam. In all heavy soils it is more subject to disease, and the flavour also is much inferior. In breaking up good pasture land, the decaying sod answers sufficiently well for the first year in lieu of manure. Manure is applied either in rows or hills, or broadcast over the hills and ploughed in, the latter in most cases being preferable. If the soil is good, but little manure is required. In highly enriched soil the plants are more liable to disease than when grown in soil that is naturally good. The best fertilizers are those of a dry or absorbent nature, as plaster, lime, super-phosphate of lime, and bone dust. For wet soils these are particularly beneficial, as they not only promote growth, but prevent disease. Plant as early in spring as the ground can be had in fair working order, in hills or ridges, about three feet apart, covering in light, warm soils, about four inches deep; but in cold, wet situations, two and a half or three inches will be sufficient.

### TREE PLANTING.

The vast benefits of tree planting on the prairies, not only to the country but to the farmer, is gradually being demonstrated, as time brings the trees and groves already planted in years gone by, to perfection, in the most conclusive manner, by a comparison of the selling value of the farms on which trees have been planted long enough to be pretty well forward, and others where this method of improving and beautifying the land has been neglected. Cases are not uncommon where farms not more favoured otherwise than their treeless neighbours, bring two and three dollars an acre more to the seller, owing to the existence of a good grove of trees. Young farmers in the newer sections of our country, and, indeed, everywhere for that matter, will find in this fact great encouragement to tree planting. We know of no other way in which the cultivation of a small section of the farm can be made to so enhance the value of the entire property. A little calculation as to the increased wealth of the country, had tree planting been universally adopted by the farmers fifteen or twenty years ago on our

prairie States, gives truly astonishing results. Add to these the benefit to the soil which would have accrued from a more extensive use of live stock by our early settlers, and the "what might have been" becomes indeed sad-denying. It is never too late to mend, however, and we are mending in these respects.

### THE SONG OF ENSILAGE.

*Air*—"The Song of Stem."

Go, build my barn in earth's cool breast,  
Cement and roof it well,  
And fearlessly your grass invest  
Within my air-tight cell;  
Level with care from top to floor,  
Each layer solid tread,  
Then load with ready weights all o'er,  
And though long months have sped,  
You'll find with joy, in my dark cage,  
A fragrant store of ensilage.

Three thousand years or more have passed  
Since patriarchs wise of old  
Their kindly fruits of earth thus cast  
In pits and caverns cold.  
And often since at man I've smiled,  
Wasting the herbage sweet,  
As all unknowingly he toiled  
Beneath the solar heat,  
Losing in air rich sap and juice  
By Nature sent for creature's use.

As I marked the cloud on the mountain side,  
Black with the coming rain,  
Burst o'er the hay-fields far and wide,  
And saturate the plain,  
And know that the water washed away  
Much that the sun had left,  
I thought of a coming better day,  
When, with a wiser thrift,  
Men saw their error, age on age,  
In making hay, not ensilage.

From many a farm I banish care,  
Largely from house and home,  
To such alike dark skies or fair,  
Shower, sun, and gathering gloom.  
My harvest-home, 'neath cloud or shine,  
Man treads in caverns cold,  
To spread before his eager kine,  
Or sheep in sheltered fold,  
Food richer still, 'neath winter's snow,  
Than if 'twere browsed 'neath summer's glow.

All climes are mine where grass will grow,  
I fatten bird and beast;  
Great dairies know how much the flow  
Of milk I make increased;  
I treble all the pastures green,  
My rich return each knows;  
I enter a farm like a spell or a charm,  
And it blossoms like the rose.  
Then who will deny that I truly presage  
New hope for the land that adopts ensilage.

All forage I sweeten, the coarsest of grass,  
The cuttings from sward and from lawn;  
Weeds, thistles, and nettles, are seeding may pass,  
With herbage to my silo drawn;  
I store up vetch, clover, rye-grass, and Lucerne,  
Indian corn, as it flowers, oats, and rye,  
And keep them and sweeten them in my cool urn,  
For use when long months have passed by;  
And in my fair volume you can't find a page  
That does not shine out with my name, ensilage.

I come, a good fairy, to homes on the prairie,  
'Midst rolling waves of grass;  
To firds in Norway, with green uplands airy,  
Where Iceland's summer's pass,  
A midsummer dream, half wet and half dry,  
To each and to all a new time  
I come to proclaim, as they heed not the sky  
Or uncongenial clime,  
Its storm or sunshine, its calms or its rage,  
Haymaking abandoned for me, ensilage.

I'm the friend of the husbandman, breeder and drover,  
The dealer and eater of meat;  
The cottager's cow I keep always "in clover,"  
Rich milk from the pail each day's treat.  
His meadow's a vault, with its fodder secure,  
A jar of preserves in the store;  
His half-acre feeds his one cow, that is sure,  
And he laughs at the tramp at his door,  
With his lucifer match, for he needs not "The Sun";  
Such gifts are my bringing. My story is done.

—J. H. Rawlins, in North British Advertiser.

RAISE large crops that leave the farm richer than they found it.

I HAVE never heard a man complain that he had tilled his land too well.

SHELTER farm implements. Rust and rot eat faster than wear and tear.

### HOUSEHOLD HINTS.

CORN starch makes the paste for scrap books.

LEMON juice and glycerine will remove tan and freckles.

CAMPHOR gum placed on shelves or in drawers will effectually drive away mice.

IRON rust may be removed by salt mixed with a little lemon juice. Put in the sun. This may be done twice.

NEURALGIA and toothache are sometimes speedily relieved by applying to the wrist a quantity of grated horseradish.

THE best thing to clean tinware is common soda; dampen a cloth, dip in soda, rub the ware briskly, after which wipe dry.

A LITTLE saltpetre or carbonate of soda mixed with the water in which flowers are placed will keep them fresh for two weeks.

HEMORRHAGE of the lungs or stomach is promptly checked by small doses of salt. The patient should be kept as quiet as possible.

HOARSENESS and tickling in the throat are best relieved by a gargle of the white of an egg, beaten to a froth, in half a glass of warm, sweetened water.

To clean nickle on stoves, take the dust from hard coal ashes, to be found in the hole under the ash pan. Apply with a wet cloth, polish with a dry one.

To prevent the juice of pies soaking into the under-crust, beat the white of an egg and brush the crust with it. To give a rich brown to the upper crust, brush that with it also.

INSECT bites, and even that of a rattle snake, have proved harmless by stirring enough of common salt into a good egg to make it sufficiently thin for a plaster, to be kept on the bitten part.

A SMALL piece of paper or linen, moistened with the spirits of turpentine, and put into a bureau or wardrobe for a single day, two or three times, is said to be sufficient preservation against moths.

ON rising in the morning always put on the shoes and stockings the first thing. Never walk about in the bare feet, or stand on the oil cloth. Even in summer time this is a dangerous and unhealthy practice.

IN a case of poisoning, one of the best emetics is salt and water, the quantity being two tablespoonfuls to about a pint of tepid water. It acts promptly and has the advantage of always being near at hand.

OLD putty can be removed without injury to the sash or glass by passing a hot soldering iron over it. The heat of the iron softens it readily, and permits its removal with a knife or chisel without much trouble.

ERYSIPELAS, a disease coming without premonition and ending fatally in three or four days, is sometimes very promptly cured by applying a poultice of raw cranberries, pounded and placed on the part over night.

As to remedies for stings, ammonia is, of course, the obvious recourse; but almost anything "strong," in a popular sense, will generally suffice to decompose and destroy an organic poison if instantly applied. This is why the juice of an onion answers the purpose. Anything equally pungent would do as well.—Lancet.

**HORSES AND CATTLE.****FEEDING EXPERIMENTS AT GUELPH.**

On these pages we place before our readers two groups of steers raised on the Experimental Farm. They are six of nine steers upon which Prof. Brown is now making beefing experiments.

Of these steers the Report says: "The Aberdeen Angus polls cannot be said, all over, to be so typical of their kind by colour, as the Herefords. The illustration shows a greyness in two, which remind me of splendid lessons I got from Mr. McCombie, of Tillyfour, in 1864, when some of his 'grand ones' were of that hue. The other animal of this group is perfectly black all over with the exception of a white spot on the under line. The second impression of these is a beefyness—a semi-grossness almost, a sort of dead language that says, 'we know nothing about milk in our

think the black steer will come out best ere Christmas, 1884; he is more reachy and finer fleshed meantime, but does not indicate the open constitution of the other—what may be called the assimilating character of a beefier.

"The Shorthorn grade steers are not supposed to be representative of any particular colour, two are pure white, the other roan, which is oldest by three months—a 15th of December calf. There is not a model among the three, the heaviest is both best in handling and heaviest in bone; the smallest is the more even all through, and the oldest is the highest standing and more wedgy. In saying "no model" I do not mean that the animals are under average, but that they do not come up to the well-known Shorthorn standard."

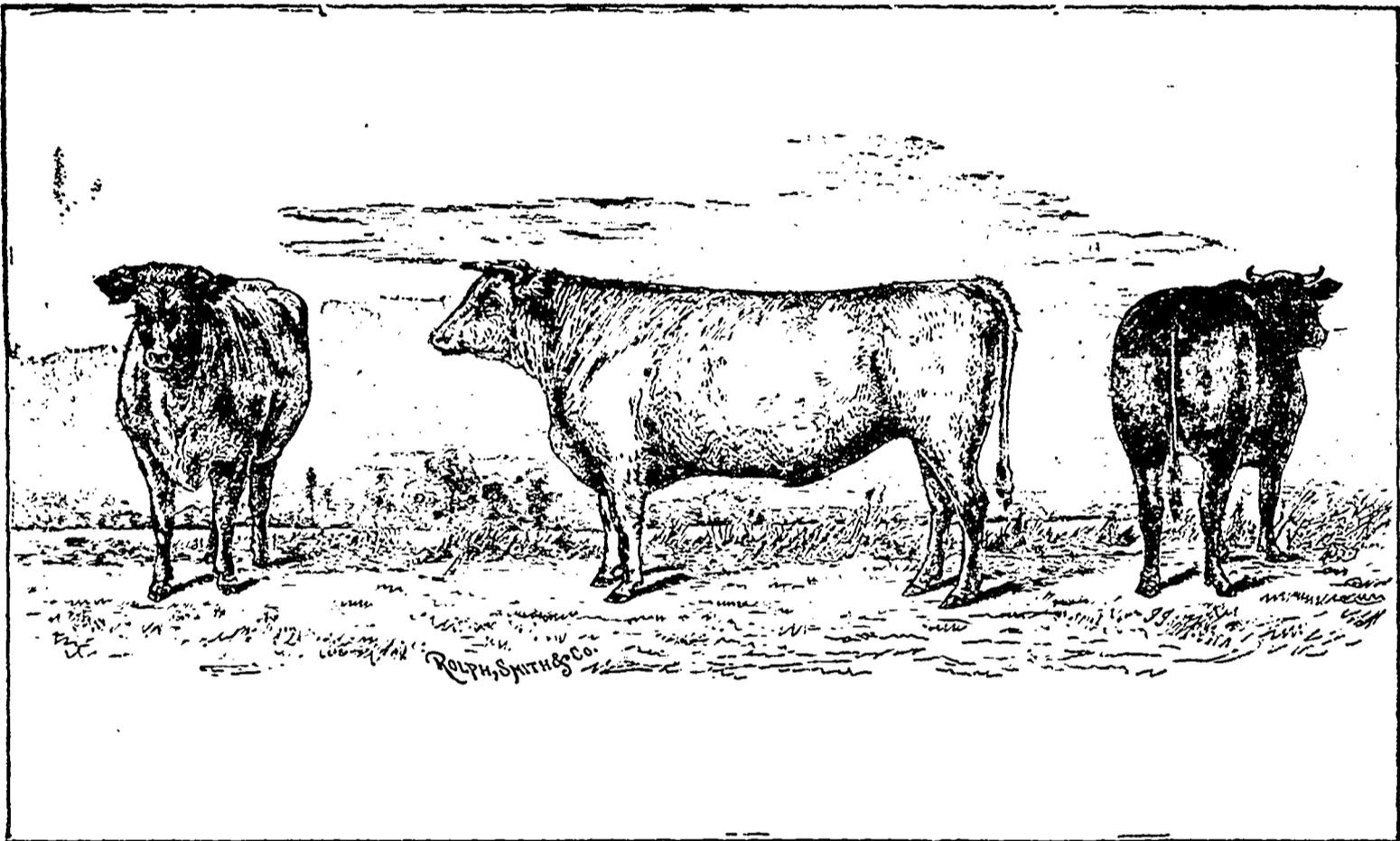
**FEEDING CATTLE.**

Experienced and observing feeders of cattle have found out that there is twice as much

pound, the gain the second year costing nearly double as much per pound as the first. Two of the most thrifty of these gained an average of 650 pounds of the third year and the cost of this gain was 12.45 cents per pound. These two steers weighed each 2,250 pounds at the end of the third year, and \$168.30, or 7.48 cents per pound. This was the average cost for the whole three years, while the first year cost less than half this per pound of gain, and only about one third the cost of gain during the third year." Prof. Stewart, who compiled the above for the *Rural New Yorker*, says, "it is easy to see that the best profit is made at fifteen to twenty months old."

**DRAFT HORSE BUSINESS.**

If you have not already plenty of good draft stallions in your neighbourhood to breed from next spring, don't wait until the season for breeding is here before you begin to think



DURHAM, AVERAGE BIRTHDAY, 1ST FEBRUARY, 1882, AND WEIGHT 1,237 LBS.

family, and the fat grazing of the Hereford or the stall feeding of the Shorthorn is all we want.' The centre animal of the group may be taken as representing his kind; no horn, not even a fast scur to tell of his mother's side; a strong, prominent poll, with plenty of hair, a sleepy eye and such a broad fine mouth and muzzle as delights the keen judge; a little flabbiness of skin under the jaw, and its perfect development on the bosom, which indicates quality with character; neck, shoulder, and forward depth, as well as the top width forward are first-class, but the loin falls off both in width and strength—not such a great deal but yet not perfect. We should have a deeper flank, but in all other respects this individual is very even—a grand mellowness under a moderate skin, and plenty of bone without coarseness. The general stamp may be inferred from the fact that on the 28th September last we were offered \$100 for this animal, when he weighed 1,020 lbs. at fourteen months; object, to exhibit at United States fairs. Some of our visiting critics

profit in the first year's feeding as in the second and three times as much as in the third. They aim to turn off their cattle when two years old on this account. These facts have been demonstrated by the exhibition at the Chicago Fat Stock Show, under the head of "Cost of Production." When an animal is raised to make beef it should be fed in the manner most liable to make the most rapid growth. This is the only way there can be any profit where land is high. In the great pastoral regions where feed costs nothing, the growth may be slower, and full age reached before slaughtering, but this system would impoverish a farmer here, where grain must be depended upon to make up most of the growth. It is winters which make the cost so great, so the fewer winters the better. "In the Fat Stock Show of 1882, nine steers and heifers, averaging 907 pounds' weight at the end of the first year, cost three-fourth cents per pound. Five of these steers gained an average of 562 pounds each during the next year and the average cost was 7.62 cents per

about the matter. If you are not able or do not care to invest as much as some first-class horse will cost, mention the fact to some enterprising neighbour, or two or three of them for that matter, and see if you cannot arrange for the purchase of a horse that will pay a good return on the amount invested, and the trouble, and by so doing enhance the value of your horse stock from 50 to 100 per cent. in a few years. It is time now to begin to map out your arrangements for next year's breeding, and the sooner you begin the better it will be for many and various reasons. You can select with more deliberation, and if one firm can't suit you, you have time to visit another. You will have time to acclimate a horse and become accustomed to his habits and requirements before the rush season begins. The matter of advertising is no small consideration, as farmers who know positively that a worthy horse is within reach are likely to breed more mares. All the advantages derived from taking hold of such a work would take up more space than we could devote to it, but the

principal point should not be lost sight of—that of inaugurating such work, and of doing it at once.—*Stockman.*

### CROSSING CATTLE WITH BUFFALO.

In the issue of the *Country Gentleman* for January 24th, I notice an inquiry by one of your correspondents as to crossing the buffalo of the plains with our native cows. I became acquainted with the only instance within my knowledge about three years ago, when on a visit to Manitoba. Learning that such a cross had been tried in the vicinity of Winnipeg, the capital of that Province, I made it my business to visit the farm on which a few buffalo cows and bulls are kept along with common stock. This farm was the property of a wealthy half-breed, since deceased. Mr. McKay, the owner, was at the time ill, and confined to his house, but his foreman directed me to the field in which the cattle were graz-

ing seen the cattle since they came into his possession, I cannot say what "improvement" or "otherwise" may have since taken place. But I am certain of one thing, and that is that if those common or native cows had been crossed with a Shorthorn bull, or a bull of any one of the other improved beef breeds, the results by this time would have been much more shapely as well as more satisfactory from a money point of view, if not quite so "picturesque."

I intend to pay another visit to Manitoba during the coming season, and intend to have another look at those buffalo crosses. If on inspection I have any reason to change my mind regarding them, I will again communicate with you.

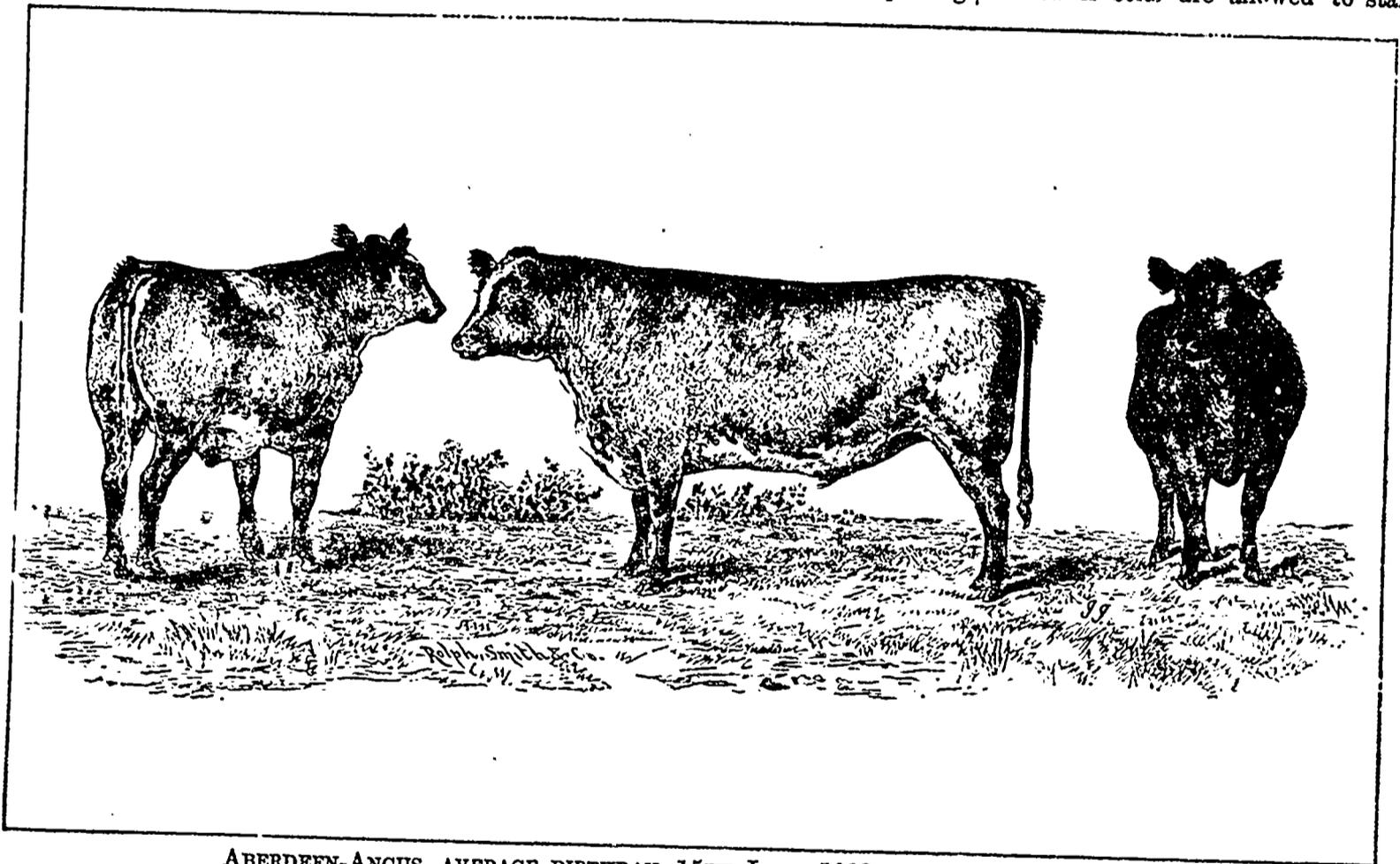
G. G.

### CURE FOR PAWING HORSES.

A correspondent of the *New York Tribune* writes that paper that the habit of pawing

habit of doing the most pawing, and when he lifts either foot up by pulling on the rope attached to it, and hold it for a short time only. The object of this lesson is to teach the horse that it is when and only when he begins to lift his foot to paw that the control of it is taken from him. When he learns this he will probably stop the practice; but for him to get this idea the foot must be taken and held long enough for him to realize that it is held every time he attempts to paw. In this, as in all teaching and all disciplinary work, the teacher and governor needs a good supply of patience and perseverance.

RINGBONE is a quite common defect in horses, and is often needlessly produced. A veterinary authority says of it: "The great majority of ringbones in young horses come from the failure to shorten their toes. To this may be added that ringbone is apt to be formed if colts are allowed to stand on a



ABERDEEN-ANGUS, AVERAGE BIRTHDAY, 15TH JULY, 1882, AND WEIGHT 1,155 LBS.

ing. My friend who accompanied me, drove with me in a buggy directly into the field and into the midst of the herd.

The buffalo cows were grazing free, like the other cows in the pasture, and like them seemed perfectly tame. Two bulls, to all appearance full blood buffalos, formed part of the group. The bulls wore rings in their black noses like tame bulls, and were chained from their nose-rings to their forelegs, but they did not seem to be disturbed by visitors. Scattered about were several young things, which were pointed out as crosses from some of the native cows, and more hideous-looking creatures I think I never saw. They were certainly no improvement on the native cows, and were equally far from being an improvement on the buffalo. The few young "full-bred" buffalos were handsome in comparison.

After Mr. McKay's death the buffalos and half-breeds became the property of the Governor of the Provincial Penitentiary in Manitoba, who, I have been informed, is carrying on the crossing from the buffalo; but not hav-

can be overcome in most cases by lifting the foot, and holding it up for a while every time the horse begins to paw. To give the horse the first lesson, he says: "Put on an old harness, buckle a strap around each of the forward fetlocks, attach a small rope five or six feet long to each strap, pass the ropes through rings or loops on the top of the saddle, take the horse to a soft smooth spot so that he will not be liable to get hurt, girth the saddle tight so that it will not turn, take up one forward foot and hold it up for some ten or fifteen minutes by making the rope fast at the ring on the saddle. The object of this lesson is to teach the horse that standing on three legs is tiresome and disagreeable work; and also to teach him that his foot is held by a superior power, and that he cannot put it down without the consent of that power. For him to get these ideas he needs to stand long enough to get very tired of it, and needs to do his best before he can realize that it is impossible for him to free it. Having given this lesson, put the horse in the place where he is in the

plank floor, or anywhere else where the footing is hard, during the first eighteen months of their age. Whether in stable or yard during this period, let them have earth for standing or walking, free from stone or gravel."

THERE is a real basis for the high prices of pedigree stock, whether sheep, cows, or horses. It may seem absurd to pay \$200 for a ram that weighs little more than 100 pounds; but if the progeny of this ram will shear eight to ten pounds of wool while common sheep average five or six pounds, with the same cost of keeping, the use of the pedigree sheep as a breeder will pay heavy interest on much more than his increased price. It is not every farmer who can breed fancy stock with profit, but there is none who cannot improve his herds by the use of the best male parentage.

The best beef is young beef, reaching its greatest point of superiority at from two to three years. The same is true of sheep and swine. As a general rule a 250 pound pig is better in quality and more profitable than a hog weighing 500

## SHEEP AND SWINE.

### A CHAPTER ON SHEEP.

Sheep, in common with our other domestic animals, have a very ancient history, indeed about equal to man's.

Sacred writ makes prominent mention of them, and plainly shows the wealth, comfort, and importance, flowing from possession of large flocks.

Able was a shepherd, and it was while watering sheep that Jacob and Moses met their future wives.

The seamless coat of our Saviour, was woven from its wool, and its skin formed the "leathern girdle" of John the baptist, while from trumpets of the sheep horns, was blown the four octaves (like the nightingale's notes) to the sound of which Jericho fell.

In the first home of the sheep, there are two breeds, one like our common English sheep, the other taller, larger horned, and with a large nose. The rams have spiral horns, and the tails of this breed are extremely large and a mass of fat. The tail sometimes weighs one fifth of the whole weight, and is fastened to a small, two-wheeled cart to save it from injury. This the animal draws along, and as by doing this, they were working, the Jews folded them all Sabbath day, to prevent its desecration. Astrachan fur is the fleece of the unborn lambs of this breed. It is a strange fact that, where conditions are favourable, sheep-keeping, once entered upon, becomes a permanent industry. It is so to day, after a lapse of four thousand years, in the land of their origin, and in Spain, England, and America.

Before Christ's birth, Italy was noted for her fine wools, and expended far more pains on them, than is done to day. The sheep were clothed and housed, had their skins oiled and softened with wine, and their fleeces often washed and combed, and to-day their descendants are noted for their fine wool.

The progress of civilization, and demand for woollen garments, caused the fleece to take first place, and fixed the types of different varieties.

But in recent days, mutton has taken the first place (though in thinly settled districts wool still bears its old relation) and the markets have decided the breed to be kept, and in fact, have caused creation of new breeds of special fitness.

The sheep that now roam over Palestine, part of Europe, and a large portion of Asia, is horned, has long hanging ears, a large muzzle, a lump of fat on the rump and is covered with a fleece of hair and wool.

Their chief use is to supply milk which is very rich and eaten sour, or curded, as in parts of Scotland. As we have them, sheep are an artificial product, in frame, fleece, and meat. The same country produces very different types, for in Spain are found the Chudah, a large, tall, heavy breed, with coarse, long straight wool. It is the original home also of the Merino that yields the finest wool grown, and there are also sound sheep, without any wool or hair, being quite smooth skinned.

As man spread over the world, he carried sheep with him, and the earliest record in England and America, show their presence

there and here. There were ten original races or breeds in Europe, but early in this century there were twenty-five breeds or varieties in Great Britain alone, chiefly named after counties where they thrive best. They were the Heath, Linton or Forest, Yorkshire, Exmoor Dartmoor, Norfolk, Wiltshire, Dorset Teeswater, Devonshire Nott, Bampton, Ryeland, Romney Marsh, Cannock Heath, Cheviot, Herdwick, Dun-faced, Shetland, Manks, Leicester, Cotswold, Lincoln, Southdown, Shropshire-down, Oxford-down, Hampshire-down. Of these, the first seven varieties were horned, but many in the list have either been merged into other breeds, or so improved as to be unknown. The *polled* were classed as long woolled, and short woolled, but now we class them as fine (short wools, middle wools, and long wools. We have received all our breeds of sheep from England, except the Merino, which was brought into South America, at its conquest by the Spanish. Merinos are known as Spanish, French, German, Silesian, and American. America seems so favourable to sheep culture, that by importing the best blood and using care and skill we now raise some of the best mutton and wool sheep in the world.

Even far away Australia pays us high prices for breeding sheep, and says they are the best.

From the early Spanish stock, are descended the majority of the large flocks of Texas, Arizona, Mexico, New Mexico, parts of California, and Colorado. They remain unchanged in character, are hardy and wiry, weigh about forty pounds, yield a fleece about two pounds, and are worth about \$1.50 each.

A good class of English sheep was imported into Virginia in 1609, and at intervals after to other places, and from them has sprung the common sheep of this country.

In the North-West of Canada, we have all the conditions for success, that have always been thought necessary. These are extensive pastures of rich grass, rich, dry soil, and dry air, with a temperate climate.

We have also the priceless advantage of a winter season totally without rain or sleet storms, that prove so severe a scourge to sheep, in other sections.

Canada is now noted for her fine sheep, and exports them in large numbers to Great Britain, and the United States.

The demand for good mutton and choice wools, is always ahead of supply, and steadily increasing, and renders sheep the best paying stock we can keep. Assume that our prairies in the wild state, will feed three sheep per acre, and double that number after seeding to cultivated grasses, does it not open a vast prospect for the very near future. When coarse, wild grasses, are close pastured, they give way to finer varieties, and these in turn, being cropped still finer by the sheep's natural selection, give way to a heavy mat of fine, sweet grasses and white clover. Pasture, alone, affects the fleece, as we find certain lands adapted to longwools, while others suit shortwools best.

The improvement of sheep means the advance of agriculture, for to feed these heavy, quick maturing, improved breeds of to-day, requires large crops of cheap roots, and green crops. To raise these crops, the best tillage,

manuring, and cultivation are a necessity.

We will now speak of those breeds most familiar to us in Canada, and especially in this half of it.

There a few Merinos, Lincolns, Black-faced Scotch, Hampshire-down, and Oxford-downs, but the most general and best know, are Leicester, Cotswold, Southdown, Shropshire-down. The first two are longwools, the last two are medium wools, and we will proceed to discuss them in detail, in future articles.—*Nor'-West Farmer.*

### A CHAPTER ON SWINE.

This is one of the four principal domestic animals, fills an important, though secondary place.

It is one of the family of Pachydorms, with their common habit of wallowing in mud, which cools the skin, prevents it burning, and protects from flies (to whose attacks, though thick skinned, they are very sensitive).

We know little of its early history, owing to the many varieties found nearly everywhere.

Up to this century it occupied a despised place, and no attempts were made to improve it.

The Bible speaks of tame and wild varieties, and the wild Boar of Palestine now is a dangerous animal.

He is swifter than a common horse, very active, and uses his tusks with fearful effect.

It is sometimes, nearly as large as a donkey, but is usually smaller than our tame breeds.

Its flesh is much superior to the common, though cheap in price, as the religion of Jews, Mahometans forbids them its use, and the bulk of their Christian fellows, abstain from its use also, in sympathy with these scruples.

It has large tusks, strong, long snout, long head, small ears, erect and pointed, and is always black, when full grown.

It matures in four or five years, and lives twenty or thirty, the sow has a yearly litter of five or six, which she suckles three or four months, and keeps with her for two or three years, until they are well grown.

The tame variety is playful, quick, and small, feeds on roots, grass, acorns and locust-tree (or carob) pods—(the husks of Scripture.)

They are owned and herded by Jews of lax religious principle, and by Christians who are not bound by this same law.

It was one of the animals prohibited by Moses, as unclean, though some of the others (as the coney and hare) are eaten by those who would sooner die than eat pork.

It cannot be said that pork was forbidden, because the hot climate, and frequency of human skin disease, rendered it dangerous to man, for pork is eaten in the East, for long periods, without harm.

Of the hog family, there are two chief divisions, one from the common wild stock, still found in Central and Northern Europe; the other, whose wild form is unknown, but of which the best tame types, are from China and Siam.

China has several varieties, white, black and mixed, all medium or small size, fattening very easily, on little food, fine boned, gentle, prolific, good nurses, and with the other points of good pigs.

England used these small, highly refined Chinese boars on her native, large, coarse, vigorous sows, and selecting the most suitable of the progeny, has, by constant care and skill, given us all the best pigs of the time.

Other nations have made little progress in this line, for, on the continent, you still find numbers of nearly true copies of the wild hog.

We owe the finest breeds of domestic animals, in the world, to England, but she has made far more improvements in the pig, than any other farm stock.

Pig history is yet young, and that of the improved breeds lies within this century.

In Western Ireland, yet lives the "Grey Hound" breed, long-legged, coarse eared, dew-lapped, savage, and good hurdle racers.

We use the term *pig* in this article (instead of *hog*, as some call it) because the best writers use the former term, and because it is a "pig" until mature, (at one, two, or more years), when it becomes a "hog," just as a boy is termed a "boy" until "manhood" is reached.

We chiefly compel the pig to pass through all stages, from birth to pork-barrel before maturity is reached, and therefore know it as a *pig*.

About sixty years ago, there were over twenty varieties, in Great Britain as follows:

Warwick, Welsh, Gloucester, Leicester, Swing Tailed, Oxford, Rudgwick, Hereford, Northampton, Norfolk, Suffolk, Hebrides, Scottish, Irish (or Highland), Devon, Dorset, Cheshire, Nottingham, Essex, Tamworth, Woburn, Shropshire, Hampshire, Yorkshire, Lincoln, Berkshire and Sussex.

Of which the last fourteen were either black or mixed black and white, or black and red.

Of them, now remain:

Yorkshire, Hebrides, Irish, Shropshire, Suffolk, Leicester, Welsh, Hampshire, Sussex, Berks, Essex, Dorsets, Nottingham, Devons and Tamworth.

Of these, the last eight are black, or mixed colour.

Thus, several have dropped out, and others been much changed.

The Yorkshire are now solid white, and have been divided into three classes, Large, Medium, and Small.

The Sussex are now solid black, and the Irish is known now as a white pig.

The Berks have their colour strictly defined, and the breed is now classed as Medium, and Small.

The Suffolks are now both white, and black, and the Cheshires are unknown in England, though bred in America, under that name.

To these breeds remaining, have been added, (by crossing, or improving the old stock) the Small Cumberland, Improved Yorkshire, Improved Oxford, Improved Essex, Improved Berks, Improved White Suffolk, Middlesex, Manchester and York-Cumberland.

It is claimed that the latter two are alike, and that the York-Cumberland is the parent stock of the three breeds preceding it, in the list.

The Essex, Berks, and Improved Oxford, are black pigs.

Among the fancy breeds added, are the Coleshill, Bushey, Prince Alberts (or Windsors, or Suffolk), Buckingham.

The last, some say, being identical with Prince Albert.

All of them are of quite recent origin, and while in process of making, were exhibited under different names, at separate times and places.

Pigs are classed as Black, or White, or Large, Medium, and Small Breeds.

A *breed*, is a collection of animals which have certain fixed characteristics, different from those of any other group, and which they are able to re-produce with surity, when bred together.

Many of the English breeds have been brought into Canada and the United States, and direct Chinese blood also used, but few have been kept pure, except those of professional breeders.

The first exciting importation was of Berks, in 1832, when \$1,000 was paid for a boar, and \$250 for a pair of young pigs.

Then came, at different times, Suffolk, Essex, Yorks, and from all these spring our present common stock.

We may suppose the reasons why more breeds are not kept pure by the average farmer are that cross breeds are more profitable for feeding, and grade boars larger and handsomer to their age.

This is also a reason why exhibition societies should strictly classify pedigreed and non-pedigreed pigs, that the two may not compete with one another.

By using these grade boars the pure blood is soon swallowed up. America has not produced any *true breed* though these are claimed to be: Chester County, White Cheshire, Poland China. But they are all of recent make up, and their characters not yet fixed. The difference between them and a *pure breed* is, that results from the latter are *certain*, while from the former they are quite *uncertain* (for the present).

The Chester originated in Pennsylvania; the Cheshire in Jefferson county, New York State, by which name they are also called, and the Poland China (or Magie) are from Butler county, Ohio, U. S. A.

Litters of impure breed will often contain pigs with wavy hair, others straight, some will have small, erect ears, and others lopped, large, and thick. Some will have blue spots on the skin, and black spots on the hair, while others may have large noses, slab sides, long legs, or be uneasy feeders, restless, and fence jumpers.

Now, the thoroughbred male and female of any long established breed when bred together, never produce offspring varying from their parents or one another. Pure blood never yields impure, like produces like, and blood will tell.

Please show me a pure Hereford without the white blaze: a pure Clyde, with slim, long leg, or black; a pure Cotswold, with a bald head, or a pure Berk, half white.

Black pigs are great favourites with our United States neighbours, who raise over forty millions of pigs, three-fifths of which are in the corn (or Mississippi valley) States.

Seventeen years ago, the prevailing colour was white, but now over ninety per cent. are black, or spotted.

Pigs are valuable in three ways; to convert unsaleable stuff into marketable values, to consume material, that, but for them, would be wasted; and to make manure.—*Nor'-West Farmer.*

## HINTS AND HELPS.

If the sheep have not been tagged, they will soon need to be.

Watch the cows in calf, they may require milking before calving.

If potatoes cut for seed are then dusted with slacked lime or ashes, they will not hurt for a week or two.

Have you seen the improved method of marking live stock, with metallic ear tags, safe, sure, neat, and cheap.

If your young pigs "scour" give them fresh skimmed milk thickened with wheat flour. Keep warm and quiet.

Are your plans for the season's work so laid and thought over that you see from seed-time to harvest without a break, except unavoidable things.

Look well to the mares in foal, and give them nourishing food and light work. The few weeks before and after a colt's birth are the important ones.

A trained collie dog is as good as a man for certain work around a farm, driving stock out or in, or running messages or taking small lunches to distant fields.

It takes about five bushels of wheat to make 200 pounds of flour, by the stone process; and from four and a-half to five by rollers, at an average cost of making of 50 cents.

In setting hens give a small one nine eggs, and a large one twelve or fourteen. Make the nest right on the ground, or (if in a raised box) put three or four inches of earth in the bottom.

If you have a good-sized pond of water near you, that never freezes solid or dries up, would it not be a good plan to stock it with European carp—one of the best food fishes; and which will thrive in any stream or pond.

Have you a chance to keep bees, and is there anyone in your household who would take charge of them, and secure the purest sweet there is? If so (if not already posted) let them send for a bee-book or two, and study the subject.

Did you make a list the first of the year of all you own and its value?—and if not do you intend doing it before seed-time? Such an inventory is of great assistance at many times, and is the first step in keeping accurate accounts; being quite as necessary to us as to the merchant.

Are all your implements repaired and ready for the spring rush—the "trip" fixed in the hay-rake, the plough coulters and points sharpened or laid, the harrow bars bolted where they split, the seeder bearings improved, the seed grain closely cleaned, and last, but still very necessary, is a summer's supply of fuel cut and placed handy to the stoves?

GOOD work may be done by farmers in the first days of spring by transplanting handsome young maples, beeches, basswoods, etc., from their woods to suitable spots in their clearings—in the neighbourhood of the house or barn, along the lane, the line fences or the street. A farm judiciously planted with shade trees is not only more attractive than one that is not, but it is worth more for grazing and grain-growing purposes and is invariably more saleable.

**GARDEN AND ORCHARD.****STALK OF TOMATOES.**

The training of tomato stems erect and single, each to a well-set eight-foot rod, combines neatness and economy. It secures more fruit, of larger size, finer form and richer flavour, while greatly enhancing the gardenesque tidiness and showiness of the plot devoted to these plants, without adding anything to the labour of their culture beyond the procuring of the stakes. But there is one drawback. The fruit ripens more slowly, because there is no check to the onward growth of the stem, such as occurs when the unsupported stem is bended or twisted by storms or by the weight of fruit. In the North, where the season closes early, this tendency to set more fruit than can ripen can be easily checked by pinching off late blossoms, and the ripening of the set fruit can be hastened by either loosening part of the roots or by piercing the stem below the fruit or constricting it with a ligature.

The greater sweetness and finer flavour of both tomatoes and grapes when the fruit is screened from the full glare of the sun either by the thin paper of a bag, or the natural defence of a leaf, should be generally known so well as to prevent the barbarous exposure of the fruit to the hot sunshine as is practised by so many in the false belief that it will improve the fruit by hastening its maturity. In this region many of the first-set tomatoes were affected with dry-rot, leaving a deep black scar nearly always upon the apex, which is the tenderest, thinnest part, and the first to show ripeness. But we had frequent rains after August 20, and the tomato plants made free growth, healthy foliage and abundant fair fruit from that onward.—*Shelal.*

**THE FARMER'S SMALL FRUIT PATCH.**

On a subject interesting to every agriculturist, the *Farmers' Review* has the following:—

"Our small fruits, including strawberries, raspberries, blackberries, currants, gooseberries, and grapes, are more easily raised and more reliable than many of the larger fruits. There is seldom a year when they fail to give a fair crop of fruit. Most of them bear freely in one year from planting, and the others in two or three at farthest, and there is not that long waiting between planting and fruit which has to be endured with all tree fruits. Aside from tempting the palate they are all valuable as food articles of diet with the farther value that the pure fruit acids are just the medicine which the system needs to keep the digestive economy in the highest stage of efficiency and insure vigorous health. The natural craving for fruit which all experience is a wise provision of nature for supplying the system with just what it needs. It is a natural appetite, not an artificial or acquired one, as in case of alcohol, tobacco, and various other things in common use. In view of these facts, which all will admit, it follows that the farmer who has abundant room in which to grow them should grow all of the small fruits in such abundance as to keep the table supplied daily with the fresh fruit in its season, and with canned, preserved, or dried, during the remainder of the year. Many

have been deterred from making liberal plantings from the idea that these must be grown in the garden, involving an amount of care and labour which, in the hurry and pressure of farm work, they cannot bestow, and so the years go on with only a meagre and wholly inadequate supply of these fruits for family use. But they all are equally well adapted to field as to garden culture, and when so treated require little more labour for their care after once planting them for the same ground in other cultivated crops. The ground does not need to be made immoderately rich. Any well-drained land rich enough to grow sixty bushels of corn to the acre, if kept up to that standard, is good enough. A half acre devoted to this purpose is the least amount to which the farmer should limit the fruit patch. A half-acre plot, eight by ten rods, is a convenient shape. If the plot butts up to a fence, space should be left for turning, for the cultivation can be done with a horse as well as that in the corn-field. Let us see how much of each of the kinds enumerated this would give us, and the amount of stock required for planting. I would make all the rows eight feet apart, except the strawberries, giving ample space for development, for air and sunshine and for the roots to feed in the soil. This will give three rows of grapes, two each of blackberries, Black Caps, red raspberries, gooseberries, and currants, and five of strawberries, planted six feet apart, all ten rods, or 165 feet long. The amount of stock of each kind required will be as follows:—

Kinds.	Distance. ft. apart.	No. of plants.
Grapes .....	8	62
Blackberries .....	4	82
Black Caps .....	4	82
Red Raspberries .....	4	82
Gooseberries .....	4	82
Currants .....	4	82
Strawberries .....	2	412

The strawberries will be in full bearing the next year after planting. The blackberries, Black Caps, and red raspberries will give a partial crop the second season, and the balance come fairly to bearing the third year. All of them except the strawberries, which need frequent renewal, if given any reasonable care will bear for years, and the whole together would furnish such a supply of fruit that it can be upon the table in some form every day of the year."

**HOT-BEDS.**

Gather and keep separate all the horse manure for some time previous, giving it a turn now and again to keep it from overheating, secure a nice dry sheltered situation facing the south. Dig out a pit a foot deep and two feet wider every way than the wooden frame in which you intend sowing your seeds; fill up this with the manure till it stand three feet high, be sure and shake the manure and if too rank mix some older stuff along with it, don't forget to give it a tramp as you proceed; If you have storm sashes at hand you have only to make your frame to suit them, allowing about a foot of a fall to run off rain. If you have not storm sashes order your glass so that it will do for both purposes. After the heat has gone down a little your frame will be ready for the seed. Most people sow in soil placed directly on the bed, I prefer sowing in shallow boxes. If you

sow them on the bed the unequal heat of the manure throws the soil off the level, what follows is that the half of the seed never sees water; and such plants as celery, cauliflowers, etc., are sure to disappoint the grower even though they look quite healthy when planted. I have always been successful by many well drained boxes four inches deep, eighteen inches wide and two feet long. If the boxes get off the level they can easily be tilted right again don't forget to put about an inch and a-half of rotten manure in the bottom of the boxes.

**TRANSPLANTING STRAWBERRIES.**

As regards transplanting the strawberry, possibly some readers may be ignorant of one portion of the process, which to every one making a plantation in a dry time, is well worth knowing. In preparing the plant, do not pull off the runners, but leave, say, six inches of them attached to each side of the plant. Bend these ends of runners down and bury them with the roots. Plants thus provided with these "umbilical cords" on which to draw for nourishment, will survive and flourish in adverse conditions under which plants denuded of their runners will almost inevitably perish. The practice of this precaution in transplanting is equivalent to almost complete insurance of success, in spite of the weather.—*Country Gentleman.*

HERE'S our grafting wax recipe. You won't find a better one: To four pounds resin and one of beeswax add one pint of linseed oil; put in an iron pot, heat slowly and mix well. Pour out into cold water and pull by hand until it assumes a light colour, work into sticks and put into a cool place until wanted. In using, oil the hands, work the wax until soft and press it tightly around the graft and over the cracks. If the day be warm it is sometimes better to occasionally moisten the hands with cold water.

THE following points favour the setting of small trees: (1) Small trees have larger roots in proportion, (2) they cost less, (3) expressage or freight is less—expressing small trees is usually cheaper than freighting large ones, and then so much more speedy, (4) less labour handling, digging holes, etc., (5) less exposed to high winds which loosen roots, and kill many transplanted trees, (6) planters can form heads and train them up to their own liking, (7) with good care, in say five years, they will overtake the common, larger sized trees. Without good care, better not plant any size. (Above is the advice given in F. K. Phoenix & Sons' fruit catalogue). True.

IN starting an orchard get trees not over three years old and plant them in nursery rows where they can be cultivated and cared for. Do this one or two years before wanted for the orchard ground. The broken roots will be healed, and new fibres formed that can all be taken up with the tree when moved again. When the time for planting comes, the trees are on hand; a few can be taken at a time and not exposed to wind and sun or bed "healing in." Imperfect trees are now easily detected without waiting till they have failed and made a vacancy in the orchard. Thus saith R. Johnston, of Shortsville, N. Y., in "Fruit Notes." It seems to us a sensible method.

**A WOMAN'S WOBS**

**A Tale of Suffering with a Sequel of Happiness—Some Domestic Experiences.**

The following letter to the Kansas City Times describing the striking, almost dramatic experiences of an American lady is so interesting and pictures so clearly the feelings and emotions of others that we reproduce it entire. It will be found very readable and instructive:

Messrs. Editors:

Did I not know that this land is filled with women who are unhappy and cannot tell the reason; are miserable when they have every reason to be joyous, I should not venture to address you this letter. I believe, however, I can offer some suggestions that will be valuable to all women and invaluable to many. When I was fifteen years old I presume I was happier and healthier than most girls in America to-day. I hardly knew what pain was except from hearsay. But the situation changed suddenly and severely. I became aware that something was undermining my life. I felt strange sensations that would come and go and then return with greater power than before. My side pained me at times and again I would feel a dull aching between the shoulders. I had darting pains through the temples and a pressure on top of my head. I lost sleep, appetite, and flesh and my friends feared I was going into a decline. I know that the feelings I then had are not an uncommon occurrence among women, both young and old, but I did not realize what it meant at that time, and so was careless—with what results will appear. From then until within the past two years I have seen but few comfortable days, and I am now fifty-five years old.

A few years after the events above stated my heart began to trouble me. At times I would feel acute darting pains and a gurgling as if water was forming. My entire right side enlarged and I felt sharp cutting pains through my lungs and rounds my shoulder blades. I could only breathe in catches or gasps and then with the greatest effort. I was without appetite one day and the next very hungry, but always constipated. During all those years I did not know what these troubles meant, nor did I realize how terribly they must end. Of course I tried to overcome them; consulted doctors and used remedies, but it was of no avail. My troubles increased with the years; I had a severe pain in the small of the back; my teeth became loosened; my tongue swelled to twice its natural size; my gums were like sponges, bleeding freely at times, and my lungs and nose both bled on different occasions. At that time I felt cold chills running up my back and I constantly expectorated a brown mucous substance that was very offensive. The fluids I passed were frequently like bloody milk and then again almost solid albumen. For thirty years I did not know what it was to be free from headache. Occasionally I would have a feeling of suffocation followed by hot flashes and a profuse perspiration. God only knows what I suffered for I cannot describe it. I only know that I existed and that my tired life was ebbing away with nothing to arrest decay.

I was in this condition a little over two years ago and neither myself nor my friends expected or hoped for anything but death. Picture, if you can nearly forty years of agony and you can understand why we felt in that way. But a brighter day came. I began a new manner of treatment and I saw new results. My pain became less intense. The most severe symptoms decreased. My hope revived and I seemed awakening to another life. I continued to improve until my health and strength returned, thus enabling me to carry out a desire which I consider a duty in writing you this letter and saying that my life, health and hope for coming years are due wholly to Warner's Safe Cure, which has done for me, and also restored many of my friends.

Many who have read these lines will possibly think I am over-enthusiastic. Is it possible to be over-enthusiastic after being delivered from a life of misery, and brought into a world of comfort and happiness? Was the blind man mentioned in the Bible, whose sight was restored, too enthusiastic? The fact is I am only doing what I believe to be my duty in making my experience public, for I know there are myriads of women who are going into the same dark path unless they are warned in time and saved as I have been. This is a most serious matter and one which concerns the welfare of the nation as well as the happiness of

the people. If the mothers of this land are unhealthy, America will become a nation of invalids, and any means which can so safely and surely avert this danger as that which I have described, should be gladly welcomed by all true men and women.

MRS. W. MASON,  
Topeka, Kansas, 271 Quincy street.

**Sparkles.**

A LITERARY man who recently tried the power of the human eye on a ferocious bull, is recovering from his wounds and bruises, but has lost all faith in such mesmerism.

"WHAT a lovely little snowdrop that is!" said a friend to a wag, as a blonde beauty, with flowing tresses, passed them in the park. "A snowdrop? I should say she was a hair belle," said the wag.

PROFESSOR (to class in history): "Why does an Indian usually make up his mind more quickly than a white man?" Small boy (near the fool): "Because he has mostly less mind to make up."

"My case is just this," said a citizen to a lawyer: "the plaintiff will swear that I hit him. I will swear that I did not. Now, what can you lawyers make out of that if we go to trial?" "A hundred dollars, easy," was the reply.

"CHILDREN," said a school examiner, after hearing some of their essays read—"Children, you should never use a preposition to end a sentence with." "Isn't with a preposition?" shouted a boy. The examiner made no reply.

PATERFAMILIAS: "I cannot conceive, my love, what is the matter with my watch; I think it must want cleaning." "Oh no, papa dear! I don't think it need's cleaning, because baby and I had it washing in the basin for ever so long this morning."

TEACHER: "John what are your boots made of?" Boy: "Of leather, sir." Teacher: "Where does leather come from?" Boy: "From the hide of the ox." Teacher: "What animal, therefore, supplies you with boots and shoes, and gives you meat to eat?" Boy: "My father."

A COUNTRYMAN applied lately to a solicitor for legal advice. After he had given the circumstances of the case, the lawyer asked him if he had stated the facts exactly as they had occurred. "Oh, ay, sir," rejoined the applicant, "I thought it best to tell ye the truth. Ye can put the lies to it your-self."

"GOOD morning, children," said a suburban doctor, as he met three or four little children on their way to school; "and how are you this morning?" "We dursten't tell you," replied the oldest, a boy of eight. "Dare not tell me!" exclaimed the doctor. "And why not?" "'Cause papa said that last year it cost him over £10 to have you come in and ask us how we were."

ON one occasion Rowland Hill was preaching for a public charity, when a note was handed up to him, inquiring if it would be right for a bankrupt to contribute. He noticed the matter in the course of his sermon, and pronounced decidedly that such a person could not do so in Christian honesty. "But, my friends," he added, "I would advise you who are not insolvent not to pass the plate, this evening, as the people will be sure to say, 'There goes the bankrupt!'"

"PLEASE, mum," said Bridget, "I've come to give ye notice." Mrs. Beacohill: "Why, Bridget! What do you mean? Haven't you always been treated well, and haven't you more privileges than most domestics?" Bridget: "P'raps I have, mum; but iver since I've been here, I've noticed that all the magazines go into the parlour, and its not until iverybody in the house has rid 'em that we see wan of 'em in the kitchen. All me friends be talkin' of the issays an' the papers, an' I feels like a fool not to be able to talk intilligently wid me company."

BOWLES, the poet, was in the habit of daily riding through a country tumpike gate, and one day, says Mr. S. C. Hall, he presented, as usual, his two-pence to the gate keeper. "What's that for?" he asked. "For my horse, of course." "But, sir, you have no horse." "Dear me!" exclaimed the astonished poet, "am I walking?" Mrs. Moore told Mr. Hall the anecdote. She also told him that Bowles on one occasion, gave her a Bible as a birthday present. She asked him to write her name in it. He did so, inscribing the sacred volume to her as a gift "From the author."

JOSEPH RUSAN, Percy, writer: "I was induced to try Dr. Thomas' Electric Oil for a lameness which troubled me for three or four years, and I found it the best article I ever used. It has been a great blessing to me." Friends may imitate Dr. Thomas' Electric Oil in appearance and name, but in everything else they are dead failures.

**Miscellaneous.**

CHARLOTTE RUSSE.—One ounce of gelatine dissolved in two gills of boiling milk, whites of four eggs beaten to a stiff froth, one and a half cups of white powdered sugar, one pint thick cream whipped to a stiff froth, and rose water or vanilla for flavouring, line a large mould with sponge cake; mix the gelatine, sugar, cream, and flavouring together, add lightly the frothed whites of the eggs, pour into the mould and set away on ice till required for use.

No. 1.

**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, malarial fever, ague, etc.?" and they will tell you:

Mandrake! or Dandelion!

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"

For 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 excruciating pangs of Rheumatism.

Inflammatory and chronic, or suffering from scrofula!

Erysipelas!  
Salt rheum, blood poisoning, dyspepsia indigestion, and in fact almost all diseases

frail

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

DR. W. ARMSTRONG, Toronto, writes: "I have been using Northrop & Lyman's Emulsion of Cod Liver Oil and Hypophosphites of Lime and Soda for Chronic Bronchitis with the best results. I believe it is the best Emulsion in the market. Having tested the different kinds, I unhesitatingly give it the preference when prescribing for my consumptive patients, or for Throat and Lung affections."

COFFEE CAKE.—One cup of strong coffee, one cup of molasses, one cup of butter, two cups of brown sugar, three eggs, four cups of flour, one nutmeg, one teaspoonful of cinnamon, one cup of raisins, one cup of currants, and one-half teaspoonful of saleratus. This makes two loaves.

IMPORTANT CHANGES.—There are two periods in the life of every female when the system undergoes great changes. First, the change from childhood to womanhood; next, that of womanhood to old age. These are the critical changes of life, and the system should be nourished and regulated by that matchless tonic, Burdock Blood Bitters. It is invaluable in all diseases peculiar to females.

TOMATO SOUP.—To one pint of canned tomatoes, or four large raw ones cut up fine, add one quart of boiling water, and let them boil till done; then add nearly a teaspoonful of soda; when it foams up, add one pint of sweet milk, pepper, and plenty of butter or one cup of sweet cream instead of the butter, a few crackers rolled fine, and serve.

If your children are troubled with worms, give them Mother Graves' Worm Expeller; safe, sure, and efficient.

HOW TO CLEAN OIL-CLOTHS.—To ruin them—clean them with hot water or soap suds, and leave them half wiped, and they will look very bright while wet, and very dingy and dirty when dry, and soon crack and peel off. But if you wish to preserve them, and have them look new and nice, wash them with soft flannel and luke-warm water, and wipe thoroughly dry. If you wish them to look extra nice, after they are dry, drop a few spoonfuls of milk over them and rub with a small, dry cloth.

ILL-FITTING boots and shoes cause corns. Holloway's Corn Cure is the article to use.

CURE FOR DEAFNESS.—As numerous testimonials will show, there is no more reliable cure for deafness than Haggard's Yellow Oil. It is also the best remedy for ear-ache, sore throat, croup, rheumatism, and for pains and lameness generally. Used externally and internally.

COFFEE CAKE.—One egg, one-half cup of molasses, two-thirds cup of sugar, one-half cup of cold coffee, one-half cup of butter, one scant teaspoonful of soda, two and one-half cups of flour, one cup of raisins, and spice to suit the taste. This makes a good sized loaf.

MR. G. W. MACULLY, Pavilion Mountain, B.C., writes: "Dr. Thomas' Electric Oil is the best medicine I ever used for Rheumatism. Nearly every winter I am laid up with Rheumatism, and have tried nearly every kind of medicine without getting any benefit, until I used Dr. Thomas' Electric Oil. It has worked wonders for me, and I want another supply for my friends," etc.

THE SECRET OUT.—The secret of beauty has been at last revealed. Without good health, pure blood and a fair clear skin none can possess good looks. What is more repulsive than pimples, blotches, and a sallow or pasty complexion? Burdock Blood Bitters reveal the fact that all can gain pure blood and freedom from the repulsive diseases of the skin that result from impurities.

ROLL JELLY CAKE.—Two eggs, one cup of sugar, one cup of cream, one-half teaspoonful of soda, and flour to make it the thickness of cream. Batter white paper, put in a long pan, bake quickly. Remove from the tin as soon as done, lay upon a towel bottom side up, spread with jelly and roll quickly as possible. Leave the towel closely wrapped about the cake until ready to cut.

MR. T. C. WELLS, Chemist and Druggist, Port Colborne, Ont., writes: "Northrop & Lyman's Vegetable Discovery and Dyspeptic Cure sells well, and gives the best of satisfaction for all diseases of the blood." It never fails to root out all diseases from the system, cures Dyspepsia, Liver Complaint, etc., purifies the blood, and will make you look the picture of health and happiness.



**SEWING MACHINES**  
3/3 OF ALL KINDS

Repaired or Built Over  
LIKE NEW.

All Work Warranted. Needles, Oil, and Parts for All Machines.

**M. O. Evans,**  
22 Queen St. West (near Yonge),  
TORONTO.



## GOOD PAY TO AGENTS.

Agents wanted in every village, town, and township, to make a thorough canvass for the RURAL CANADIAN. Liberal inducements. Work to commence at once. For full particulars address

**O. BLACKETT ROBINSON,**

Jordan Street, Toronto.

Publisher.

## The Rural Canadian.

TORONTO, MAY, 1884.

### A GOOD COUNTRY FOR FARMERS.

We clip the following sensible and timely remarks from a city contemporary:

"Rev. J. A. Nelson, of Lawrence, Kansas, has been travelling through western Ontario, and writes to the *Lawrence Gazette* on Canada and Her Customs. He says it is a good country, and that the people have more health and comfort than can be found anywhere else, although they think they can do better in the States. 'The greatest fault and wonder,' he says, 'is they do not seem to believe either in themselves or their country. They disparage their land and the crops they produce. They compare opportunities with the States unfavourably to themselves.' Rev. J. A. Nelson is right. The great trouble with Canadians is that they have not enough national conceit. One reason for Toronto's rapid growth is that the people believe in it. They think it has a great future before it, and are ready to invest their savings here. Every resident of Toronto is certain that it is bound to be a very great city. If Canadians generally were so enthusiastic regarding the future of the country, its progress would be as wonderful as that of Toronto."

Yes, Ontario is a good country, but, if we don't show that we appreciate it, who will? There has been entirely too much said in our public journals in praise of our North-West and of prairie regions generally, and Ontario has reaped the fruits of it in losing a very large number of her best citizens. Thousands of thrifty and enterprising men have sold their farms during the past four or five years and have gone to the West or the North-West, carrying with them in hard cash, the earnings of an industrious lifetime, and leaving behind them, in far too many instances, farms loaded down with mortgages by the new owners. Take, let us say, a farm of one hundred acres, worth \$7,000. The new owner is able to scrape together \$2,000, and the balance of \$5,000 is raised by mortgage. The \$7,000 is taken out of the country, and along with it, perhaps \$3,000 realized from the sale of stock, implements, etc., to say nothing of other accumulations of thrifty husbandry, or of men and women whose value cannot be computed in money. And what have we left? The farm is there, it is true, but the \$5,000 mortgage is on it and two chances to one that mortgage will keep the nose of the new proprietor to the grindstone as long as he lives. Meantime the old proprietor finds himself struggling with pioneer hardships—perhaps in Dakota, perhaps in Manitoba, or perhaps in regions two or three hundred miles beyond. He begins life in a world that is entirely new to him. His neighbours, if there be any such nearer than a mile or two, are men he never saw nor heard of before, and when he comes to know who they are he may discover that of all men they are among the least desirable to know. There are no schools, no post-office, no store, no roads, no market place, and the only preaching he hears is when a colporteur or a missionary strays along the way. Moreover, he has to run the gauntlet of cyclones and blizzards with a rickety shanty over his head, and his crops may rot under excessive rains, be dried up with drouth, or devoured by grasshoppers, or destroyed by prairie fires. He learns when too late that in selling the

Ontario farmstead, and leaving a comfortable home, the society of old friends, and all the advantages and conveniences of civilized settlement, he has made an irreparable mistake. Not only so, but he learns that all the highfalutin' descriptions he once heard or read of concerning the fertility of prairie lands and the big bonanzas in prairie farming have been for the most part stuff and nonsense, and that his old Ontario farm when well worked would yield him greater comforts and larger profits twice over. No, we don't sufficiently appreciate the value of Ontario in an agricultural sense, and too many of our people have as a consequence been led to chase after chimeras. It is time that we awoke to the gravity of the situation, and that we talked the words of truth and soberness to our own people.

### MANURE RUNNING TO WASTE.

We think that if correct figures were obtained of the quantity of manure and other fertilizers that is wasted every year in Ontario, the result would be startling. In the cities, towns, and villages the aggregate is enormous, and yet the greater part of it might be obtained by farmers at the cost of carting it home. Indeed, we fear the statement is too true, that on a large number of farms in the country the home product is not utilized, or, if it is, that no care is taken to get it into fit condition for giving strength and richness to the soil. This is a subject that demands attention, and it cannot be neglected, if a good average of crops is going to be maintained. We noticed in a London exchange the other day that the city authorities offered to supply the Asylum farm with the refuse, garbage, and excreta of the city, and that their offer had been gladly accepted by the superintendent of the institution. The farm has an area of three hundred acres, of which two hundred are for farming and forty-five for gardening purposes. The material will be collected by the city scavengers in air-tight tanks or barrels, and deposited in a reservoir or manure yard of the farm, where it will be thoroughly composted for use as required. We have no doubt that the experiment will prove to be a satisfactory and profitable one, and we shall be surprised if farmers of the locality, who observe the results, do not become earnest rivals with the superintendent of the Asylum farm for the supply which he has just agreed to take as a favour to the city. But what shall we say of farmers in the vicinity of Toronto, who are far more neglectful of their opportunities? It is a fact that enough manure, the most valuable for fertilizing purposes, is flooded out from the cattle byres into Ashbridge's Bay every year to supply eighty farms, of a hundred acres each. There are at the present time 3,800 head of cattle fattening in those byres, and the flume or channel which carries the solid and liquid manure out into the bay, is a steadily flowing stream. To such an extent has this deposit reached that the bay now resembles nothing so much as a huge barnyard, full to overflowing with liquid and solid manure. We confess astonishment at this great waste, and especially in the vicinity of lands so much in need of the best kind of manure for the production of good crops. Here, if anywhere, there is a fortune to be had for the taking.

### CANADIAN SHORTHORN HERD-BOOK.

Below we give transfers of thoroughbreds reported up to April 21st, 1884. In the following list the person first named is the seller and the second the buyer.

Cow, Carnation (vol. 4), by Alexis [2676].—John Payne, Cayuga; F. J. Ramsey, Dunnville.

Cow, Serena (vol. 6), by Grand Duke [7153].—F. Martindale, York; F. J. Ramsey, Dunnville.

Cow, Glasserton Belle (vol. 8), by Cayuga Chief [2859].—F. T. Docker, Byng; F. J. Ramsey, Dunnville.

Cow Glasserton Maid (vol. 8), by Scotsman 3rd [6229].—F. T. Docker, Byng; F. J. Ramsey, Dunnville.

Bull Calf, Sir William [11860], by Framework 4th [9975].—Thos. A. Wright, Cartwright; A. Hanna, Enniskillen.

Bull Calf, Spotted Chief [11862], by Erin Chief [11861].—J. Marshall, Jackson; N. Barber, Tara.

Bull, Duke of Rosehall [11867], by Victor Emmanuel [11866].—Noah Bricker, Roseville; S. Cassel, Hayesville.

Bull Calf, Earl of Rosehill [11868], by Victor Emmanuel [11866].—Noah Bricker, Roseville; Meno Snyder, Elmira.

Bull, Prince James [11472], by Captain [9742].—R. Sommersville, Elder's Hill; Geo. Mitchell, Clarksburg.

Bull, Duke of Springbrook [11874], by British Statesman [8175].—Green Bros., Oakville; Lewis McKenney, Kingsmill.

Bull Calf, John A [11875], by 5th Lord Red Rose [10178].—T. C. Stark, Gananoque; John Thompson, Gananoque.

Bull, Guy [11876], by Lord Bright Eyes 1st [7319].—T. Dunbar, Harriston; P. Smart, Palmerston.

Bull, Stanley [11877], by Fairview Chief [9965].—R. D. Dundas, Springville; G. Scott, Peterboro'.

Bull, Western Duke [11859], by Mazurka Duke [5703].—R. B. Ireland, Nelson; John McDonald, Rock Lake, Manitoba.

Cow, Lily of the West (vol. 9), by Mosstrooper [7495].—R. B. Ireland, Nelson; John McDonald, Rock Lake, Manitoba.

Bull, Tuscarora Duke [11858], by Mazurka Duke [5703].—R. B. Ireland, Nelson; John McDonald, Rock Lake, Manitoba.

Bull, Wentworth [11879], by Mosstrooper [7495].—John Dodd, East Flamboro'; T. Halt, Dundas.

Bull, Essex Lad [11883], by Jupiter 2nd [3419].—George Axford & Son, Talbotville; Saml. McCauley, South Woodslee.

Bull, Baron Balsam [11886], by Ouray [7575].—George Hickingbottom, Balsam; Richard Ward, Balsam.

Cow, Bell Atha (vol. 9), by Baron Balsam [11886].—Thomas Hickingbottom, Balsam; Daniel Brims, Atholstane, Que.

Bull, Tom [11511], by King Lear [10110].—Jas. McArthur, Ailsa Craig; Jas. S. Grant, Granton.

Heifer Calf, Maude 6th (vol. 9), by Fairview Lad [12126].—Thomas Dunbar, Harriston; Valentine Plantz, Neustadt.

Cow, Farmer's Daisy (vol. 9), by Earl of Grass Hill [7031].—Wm. Glennie, Conestogo; John Dick, Britton.

Bull, Forest Prince [11894], by Earl of Grass Hill [7031].—Wm. Glennie, Conestogo; Andrew Corry, Britton.

Bull, Tiger [11896], by Earl of Grass Hill [7031].—Wm. Glennie, Conestogo; Dr. H. Banman, St. Jacobs.

Bull, Frederick [11895], by Earl of Grass Hill [7031].—Wm. Glennie, Conestogo; S. Musselman, Conestogo.

Bull, Fawsley Duke 5th [11895], by Baron Fawsley 4th [10897].—D. Mackenzie, M.P.P., Hyde Park; Henry-McGurk, Colville.

Bull, Leopold [11902], by Oxford Chief [9047].—James Rea, Mimosa; John Rea, jr., Eramosa.

Bull, Triumph [11907], by Champion [9757].—Abraham Huff, Chatham; D. McDonald, Chatham.

Heifer, Beatty (vol. 9), by Duke of Kent [9876].—Abraham Huff, Chatham; W. Attwood, Salford.

Bull, Statesman 3rd [11912], by (imp.) Statesman [4119].—Thomas Coates, Shirley; Samuel Treneller, Little Brittain.

Bull, Duke of Oxford [11913], by Baron Thorndale [6621].—Wm. Colyer, Ingersoll; Adam Armstrong, Ingersoll.

Cow, Alicia (vol. 9), by Sherbrooke Duke of Airdrie [6246].—Col. Boulton, Cobourg; R. Clarke, Colborne.

Bull, Grafton Boy [11208], by Geordie [7119].—David Elliott, Grafton; R. Clarke, Colborne.

Bull, Grafton Lad [11209], by Geordie [7119].—David Elliott, Grafton; Platt Hinman, Grafton.

Bull, Hamilton Chief [11079], by Haldimand Chief [8652].—Platt Hinman, Grafton; Alonza W. Huyck, Castleton.

Bull, Duke of Haldimand [11916], by Baron Sharon 4th [4600].—M. O. Merritt, Smithville; Jos. High & Son, Rainham.

Heifer, Spring Creek Daisy (vol. 9), by Sultan [10981].—John Doyle, Elora; James Grills, Elora.

Bull, Lord Palmerston [11923], by Sultan [10981].—John Doyle, Elora; Ed. Goodwin, Palmerston.

Bull, Duke of Oxford [11926], by Duke of Wellington [11401].—W. & C. Carroll, Norwich; Samuel Tuttle, Oriol.

Bull, Roaring Lion [11905], by Canadian Framework [8198].—Wm. Werry, Solina; R. T. Phillips, Whitby.

Bull, Dollar Duke [11927], by Ned of Thornhill [7508].—A. Muldoon, Thornhill; Peter Boynton, Dollar.

Bull Calf, Jumbo [11928], by Dollar Duke [11927].—P. Boynton, Dollar; B. Vradenburg, Ellesmere.

Cow, Alpha 6th (vol. 9), by Isabella's Oxford 2nd [5415].—Seth Heacock, Kettleby; R. J. Kennedy, Aurora.

Bull, Waterloo Lad [11934], by King [10831].—James Taylor, Mosboro'; John Paterson, Campbellville.

Bull, Waterloo Boy [11033], by King [10831].—James Taylor, Mosboro'; E. Bracey, Breslau.

Bull, Earl of Woolwich [11932], by Brown Joe [11169].—J. S. Snider, Winterburn; Jas. Taylor, Mosboro'.

Bull, Earl of Fairview [11931], by Earl of Clifton [8503].—E. Pannabecker, Hespeler; Jas. Taylor, Mosboro'.

Cow, Lucy (vol. 9), by Turk [11172].—Thos. Tréharne, Denfield; J. Zavitz, Poplar Hill.

Bull, Duke of Norfolk [11954] by Royal Duke [7794].—James Healy, Strathroy, Jno. Eldridge, Hepworth.

Bull, Earl of Britannia [11957], by Red Duke [9196].—Paul Brown, Britannia; John Read, Streetsville.

Bull, Sir Arthur [11958], by Captain Cook [8207].—George Bell, Edgely; E. Whitmore, Edgely.

Bull, Orpheus 17th [11962], by Wild Eyes Duke [6503].—Canada West Farm Stock Association; J. R. Martyn, Cayuga.

Bull, Bell Duke of Springwood [11963], by 2nd Duke of Springwood [5978].—G. Hickingbottom, Whitby; R. Mutch, sr., Auburn.

Heifer, Purity (vol. 9), by Barmpton Hero [6595].—Chas. Nicklin, Ponsonby; M. Durrant, Winterbourne.

Bull, Prince Leopold [11970], by Lord Nelson [10170].—Robt. Hall, Peteboro'; Jos. Harrison, Springville.

Cow, Lady Juliet (vol. 9), by 11th Seraph [11971].—W. W. McAlister, Stoney Mountain; Laycock Bros., Fort Ellen, Manitoba.

Bull, Lord Marmion [11972], by Lord Byron [8819].—W. W. McAlister, Stoney Mountain; Laycock Bros., Fort Ellen.

Bull, Duke of Wellington [11973], by Marquis of Lorne [9443].—Geo. Burnett, Winterbourne; Henry Ernst, Maston.

Bull, Napoleon [11974], by Marquis of Lorne [9443].—Geo. Burnett, Winterbourne; E. Heber, Conestogo.

Bull, Glanford Duke [11975], by Lorne [7393].—Chas. Terryberry, North Glanford; D. H. Baldwin, Carlo, Ill.

Bull, Wentworth Lad [11976], by Lorne [7393].—Chas. Terryberry, North Glanford; D. H. Baldwin, Carlo, Ill.

Cow, Duchess of Stonewall (vol. 9), by Edward Hanlan [7046].—W. W. McAlister, Stoney Mountain; S. J. Jackson, Stonewall.

Bull, Duke of Stonewall [11978], by Alister McAlister [9655].—W. W. McAlister, Stoney Mountain; S. J. Jackson, Stonewall.

Bull, Red Rock [11980], by Lord Byron [6810].—W. W. McAlister, Stoney Mountain; Thos. Madill, Stonewall.

Bull, Mountaineer [11979], by 11th Seraph [11971].—W. W. McAlister, Stoney Mountain; D. McDonald, Stoney Mountain.

Cow, Grassmere Beauty (vol. 9), by 11th Seraph [11971].—W. W. McAlister, Stoney Mountain; Alex. Matheson, Stonewall.

Bull, Garfield [11946], by Constance Duke [8261].—Jas. Cowan, Galt; Hugh Ferguson, Avonbank.

Bull, Prince Edward [11947], by Garfield [11946].—Edmund Turner, Carlingford. Allan Davis, Prince Edward.

Bull, Honest Willie [11985], by Clockmhor [11983].—R. & W. Scott, Harriston; George Leibolt, Alfeldt.

Bull, Carrick Lad [11982], by Earl Minto [7020].—R. & W. Scott, Harriston; M. Vollick, Mildmay.

Bull, Young Minto [11986], by Earl Minto [7020].—R. & W. Scott, Harriston; R. McDonald, Jamestown.

Bull, Forest Hope [11991], by Fashion's Hope [7087].—Wm. Hedloy, Duncrief, Wm. S. Whillans, Forest.

Bull Calf, Milverton [11988], by Royal

Barmpton [11967].—Benj. Shuh, Berlin; H. Doering, Milverton.

Bull, Stanley [11969], by Napoleon [9005].—B. Shuh, Berlin, J. S. Hallman, Petersburg.

TABLE SHOWING THE QUANTITY OF SEEDS USUALLY SOWN UPON AN ACRE.

BARLEY. Broadcast	75 to 100 lbs.
BEANS. Drills	60 " 100 "
BEETS. Drills	4 " 6 "
BUCKWHEAT. Broadcast	50 " 55 "
CABBOTS. Drills	3 " 5 "
CLOVER. All sorts	8 " 10 "
CORN. In hills	15 " 20 "
" For fodder	150 " 175 "
FLAX. Broadcast	75 " 100 "
GRASS. Blue	10 " 15 "
" Red top	15 " 20 "
" Orchard	20 " 30 "
" Timothy	6 " 21 "
" Hungarian	25 " 50 "
" Millet	25 " 50 "
" Mixed Lawn	00 " 50 "
OATS	65 " 100 "
ONION. Drills	5 " 6 "
PARNIP.	4 " 6 "
PEAS.	75 " 30 "
" Broadcast	150 " 180 "
RADISH. Drills	8 " 10 "
SPINACH.	10 " 12 "
TURNIP.	1 " 2 "
" Broadcast	3 " 4 "
TARES.	120 " 180 "
WHEAT.	60 " 120 "

General Grass Seed for Mowing:

CLOVER	} together	5 lbs.	} Clover 6 lbs.
TIMOTHY			
RED TOP	} an acre	7 "	} Timothy 6 "

THE Argentine Republic and Patagonia promise to be great future grain producers.

MINNESOTA wheat seems to be growing softer, being more so this year than ever.

THERE are 350 herd of pure-bred cattle in Ontario, the average being 10½ cows and three bulls.

DANISH butter brings thirty-three cents a pound in London, England, and Jersey twenty-five cents.

OVERSHOT-WHEEL mills can be run by dry sand—spouted to the wheel and returned by elevator buckets.

THE Montreal Corn Exchange advises that all taxes on breadstuffs between Canada and United States be done away.

THERE are 300,000 dogs in Tennessee, U.S.A., causing a yearly loss in sheep raising (preventing of) of eight million dollars.

MARCH 1st there were 7,773 cattle suffering from foot and mouth disease in Great Britain, and 1,580 were attacked the week ending that day.

A Jersey cow has lately yielded 323 lbs. 11 oz. milk in seven days, churning 27 lbs., 10 oz. butter, beating "Mary Anne of St. Lambert" by three-quarters of an ounce.

INDIA sent her first trial cargo of wheat to England in 1874, and in 1882 sent thirty-seven million bushels. Still she has over 100 million acres of land not yet used for wheat.

IN Germany it costs \$17.50 to cultivate an acre of wheat. It costs \$14 in the United States; but the return in Germany is \$22.75 per acre, and in the United States only \$14.31.

THE 14th vol. American Jersey C. C. Herd Register is out. Bull numbers carried from 10,000 to 11,000, females from 21,000 to 23,000 though less than three months since vol. 13 was issued.

## BEES AND POULTRY.

### INTERESTING PARAGRAPHS ABOUT BEES.

Bees are members of the very large, and important order of insects, the Hymenoptera, which also includes the ants:—

In the scale of animal life we may place the bee next to man, for intelligence and skill.

Bees, honey and wax are referred to in the Scripture; and they are now plentiful in Palestine, where they have been bred for over 3,000 years.

Eastern hives are of burnt clay, like a drain pipe, at one end being a hole for hooking out the honey, while at the other the bees enter. The other honey, or "dibs" of the Bible, was made from the boiled juice of grapes.

Wax is used as a metaphor and no other reference is made to it in sacred writ.

Bees were well-known in England in the reign of Henry III.; and the American bee has been imported from Europe, those now found wild on this continent, having escaped at times.

The common, or Black Bee, is a native of Germany, and has been improved by crossing with the Italian (or Ligurian) stock, brought into America in 1860.

These and the Cyprian are the best known varieties, though there are other valuable, foreign breeds.

Our present knowledge of bees, and improved method of keeping, are mainly due to four devoted, untiring, and able observers, Huber and Dezierzon in Europe, Langstroth and Quinley in America, and they have been ably aided by such men as Hetherington, Root, Cook, Jones (of Ontario) Muth, and many others, fascinated with the gentle science. None, but those who know, would believe all the wondrous tales of bee life, that the daily work of an apiarist unfolds.

A hive consists of the brood, one queen, several hundred drones, and many thousand workers (about 12,000 to a medium hive). The queen has a long, large, pointed body, has a sting, lives from two to four years, and lays perhaps 100,000 eggs in a season, and sometimes 2,000 in twenty-four hours. She meets the drone (male) in the air, and one connection fertilizes all the eggs laid in her lifetime. Laying is her work, and she does not govern the hive-work, as was once thought, though the bees seem fond of her, and if she is removed from any cause, they know it in about one hour. They will work for a short time without her, but then, taking a cell (containing an unhatched *worker*) they enlarge it, feed the larva royal jelly, and turn it into a queen. A queen takes sixteen days to hatch, and her first act is to kill the other queens, about hatching out. The first eggs laid are workers, the next drones, the third are queens, and lastly workers again, until the end of life.

The drones are short and stout, without stings, with large eyes meeting at top of the head; they hatch in twenty-four days, and they live from a few hours to a few months as necessity demands, being stung to death by the bees if honey supply runs short, or when swarming is over, as only one of them is required to meet the queen.

The workers are smaller, and are unde-

veloped females. They hatch out in twenty days, and for several days the young bees work within the hive, and after that, outside, collecting stores. They live from one to eight months; that is, if hatched in a busy time their life is short, but if in autumn, the life is longer as the dormant state they pass into in winter, does not use up their powers. The breeding begins about February or March, and in June and July "swarms" are thrown off from the parent hive. Four have been sent out in fourteen days, in one instance. The early swarms are the best.

Bees collect honey, wax, bee-bread, propolis, poison, and royal jelly. Honey is the nectar of flowers—though the bees gather it from other sources, as honey-dew, fruit, etc. This nectar, or honey, passes into the honey sack, or second stomach, devoted to that use, and from thence to the hive cells, but bees do not make honey as is commonly thought. Wax is secreted from the honey by the bee, and forms in scales on the under part of the body, from whence the feet remove it, and molded with the jaws, it is used for building honey-comb. Bee-bread is the pollen of flowers, and is the chief food of the young bees. Only one kind at a time is gathered, and is carried to the hive in little sacks on the hind legs. This is rubbed off into cells by the carrier who leaves it, and another bee packs it tight, with its head, and, when two-thirds full, it is topped off with a little honey, and the cell sealed (covered) with wax, like the honey cells. Propolis is the gum of certain tree-buds, and is used to seal cracks in the hive, and coat the inside—a layer appearing to be added yearly—the greater part being gathered in August. Poison is the fluid held in a sack at the top of the sting, which is left in the wound. If you attempt to *pull* it out, you only press more venom in, the right way is to *scrape* it off *sideways*.

Quick motions, offensive personal smells, (as from tobacco users, etc.) breathing into, or standing in the line of flight of the hive, cause the bees to sting. Bees only sting near the hive, never while out working, or on their way home, and they seldom warn. The poison loses its effect when often repeated, and some bee-keepers do not mind it. Many are afraid to keep bees on this account, but if you treat them reasonably, there is no more fear of them than there is of so many pigeons.

The comb of the bee-hive resembles several single sheets of paper hung from the roof, close set on each side with cells (twenty-five to the square inch) about one-fifth of an inch in diameter and seven-sixteenths deep, for worker cells. Drone and queen are of course larger, sixteen or less to the inch.

It has been proved that bees will fill cells, of other shape and size than their own make, and also that if removed to an ever-blooming country of flowers, they still store honey, though some poetical writers say not. Great advance has been made of late in bee-keeping, as in using moveable frames (and thus completely controlling the bees), and the adoption of comb foundation, and extractors. It requires from fifteen to twenty-five pounds of honey to secrete one pound of wax, and the time of the wax-worker (or cell-maker) is worth as much more—and, both these drains, the artificial comb lessens.

The average yield per hive, in a range of

years, is from seventy to eighty pounds though 586 pounds have been made, under exceptional care and opportunities, and again, in poor years, from twenty pounds to none, have been known. The extractor allows the honey to be taken from the combs, and the latter are returned for refilling *uninjured*. Bees have few diseases or enemies, dysentery (or spring dwindling) foul brood, moths, being the chief, and they are all avoidable.

Canada produces as fine honey as anywhere, but not enough for her own use, though well suited for bee-keeping. Honey pays in Ontario, at 14 and 16 cents a pound. Manitoba and the North-West are as well suited to bees as Ontario, having abundant wild-bloom of plants and trees, a clear, dry air and a greater number of bright days. Some beautiful specimens of honey have been made here, already. The chief point is the wintering, which must be done in a quiet, dry, dark, frost proof place, kept at a temperature from 9 to 13 degrees above freezing. Bees give out great heat, in one case, when 6 degrees below freezing outside, it was 22 *above* in the hive, and strong hives will rise to 75 and 88 degrees in winter. The first honey in the spring is from the willows, then maples, fruit trees, dandelions, clovers, small fruits, basswood, thistles, and ending up with fall flowers and late blooming trees. Basswood is the greatest honey yielding tree, but it stands second to white clover in quality (in general estimation) and price, thistles coming third. There are many other bee plants, notably buckwheat, which yield a plenty of dark, peculiar-flavoured honey much liked in England.—*Nor'-West Farmer*.

### POULTRY.

Under this head we include the four divisions: Fowls, Ducks, Geese, and Turkeys.

In the extent to which they are kept, and the profits from them, they stand about in the order named.

The early history of the common fowl is unknown, though the Jungle cock of India, is supposed to be its parent. The Old Testament is quite silent about domestic fowls, though the New refers to them often, and Pliny mentions them also. We hear of them as bred on the shores of the Mediterranean, 1,500 years before Christ, and in the east the game fowl has been bred for fighting use, from very early times.

Fowls are kept wherever man dwells, but we must thank Asia for the original stock of all the many varieties of the present. In England, in the reign of Edward I., fowls were sold for one penny each, and up to as late as forty years ago, there were only these breeds known there: Game, Dorking, Poland, Horsham (or Sussex), Common, Shack-bag, Malay, Bantam. To these have been added by improving, or importing the present long list.

In America we have about every variety of any importance, and have made some new ones of great value. In 1852 there were 2,500 birds shown at Boston, and now the poultry shows are a regular, and striking feature of the yearly exhibitions. The trade has become very large and profitable, and supports several papers devoted to its interests. The Giant Malays were the first of the asiatics brought

to America, some of them being two and a half to three and a half feet tall. In 1847 the Cochins or Shanghies created a "hen fever," and large prices were paid; one cock sold for \$525, and eggs for hatching in proportion.

Now we have Cochins, four varieties; Brahma (Pootras), two varieties; Malay; Game, forty-four varieties; Dorking, three varieties; Spanish, five varieties; Hamburgh, five varieties; Polands, seven varieties; Dominiques; Langshans; Plymouth Rocks; Leghorns; Crevecours; La Flèche; Houdans; Breda (or Gueldres); La Bresse; Bantams, seven varieties; Dumpies (or Creepers); Red Caps; Silkey (or Negro); Emu (or Silkey Cochin); Frizzled; Rumpless. Of these, the last seven are chiefly ornamental, though each has some one or more useful points; but are not generally known. Of the next five, (except the Houdan) they are not yet much known outside of France, though having many very valuable points, which must make them popular some day.

#### DUCKS.

There are many wild varieties, but the best known, and the one from which it is thought our common tame stock sprung is the Mallard. Its plumage is exactly like the Rouen (tame) duck, and the majority of common tame ducks one sees are stunted Rouens.

The breeds are, Aylesbury; Rouen; Pekin; Muscovy; Cayuga; East Indian (or Buenos Ayres); Call. The first three named, are the best and most known, the others being fancy, or little known, though with good points also.

#### GEESE.

There are about a dozen wild varieties, the largest being the common "Gray Lag" of Europe from which are descended nearly all our tame varieties.

The tame breeds are, Toulouse; Embden; Common; Chinese; Egyptian; Hawaiian; Siberian; Sevastopol; Don; Caromandel; African. The first three are widely known and the most valuable, the others being local or fancy breeds, and not in common use.

The goose is the earliest domestic water fowl, and lives to the greatest age (50 to 100 years) and was held in high regard by the ancients. There are five known species, two of which are common to America, the rest to the other three quarters of the globe.

#### THE TURKEY

is a native of North America, and the wild form is still found in the western portions. It was taken from Mexico to Spain, and thence to England, in 1524, and spread from there over the world. Early writers fancied it came from Turkey, and so named it.

The tame varieties are the, Bronze; Black; White; Buff; Narragansett; Slate; all of them good, and having their separate patrons.

Of the many other domestic birds, and animals commonly called "pet stock" kept for pleasure or ornament, we intend speaking at some future time. Such are pea-fowl, Guinea-hens, pigeons, cage-birds, rabbits, dogs, cats, etc., etc.

The value of poultry (on a farm, and their exports to a country) are not so well seen as those of larger stock, because made up of little things. A hen in a year ought to lay one hundred and fifty eggs, worth one cent and a-half each, or a net profit from each hen of

one dollar a year. But, in this country where eggs and poultry are so scarce and costly, and food so cheap, the profit would be very much larger.

As far away as 1877, one steam-ship from Montreal for England, took nine thousand head of poultry, all four varieties.

In proportion, poultry pays the best of any stock, and eggs are cheaper than any other food, for the nutriment contained. A pound of egg equals two and three-quarter pounds of beef, and contains in itself, all needed to sustain life, being, in this respect, like milk. As the weight of an egg increases very rapidly with its size, they should be sold by weight, as it is not fair to the breeder of large eggs to sell them at same price per dozen, as those from smaller breeds of fowls. It would also save the buyer getting stale eggs, as the latter weigh light, and would be detected at once with less trouble than the present process.

#### INCUBATORS.

A great and growing interest is taken in hatching eggs by artificial means. It has been a common, and perfectly successful industry in Egypt, for thousands of years. Its European history is recent, and not perfect, though wide and good success is had in France, where thousands of chickens, not one day old, are sold at fairs for raising.

The bush turkies of Australia gather about two to four cart-loads of vegetable matter in a heap, lay their eggs in the middle of it, cover them, and leave them to hatch by the heat of the rotting pile.

Reamur first took up the subject in Europe, working it with fermenting manure, and this process improved in America, but is said to be dirty, and troublesome, though still used in parts of France. Cantelo was the first to supply heat from above the eggs, and Menasi, and a host of others everywhere have followed him, using hot air, steam, water, and lately, electricity.

At present artificial hatching, has reached great success, but not enough for general adoption, and there is a fortune ready for the inventor of an Incubator as certain, and as little trouble as the old hen. Almost any will hatch from forty to sixty per cent, with close care and attention, and without these the best will fail. The common form is to supply heat from water (heated by a lamp) to a tray of eggs beneath regulating the heat by thermometers, and the whole encased in a box, with non-conducting linings.

The heat required is as near one hundred and two or one hundred and three degrees as possible. A little extra heat kills, though the eggs may get stone cold while hatching without injury. Though ninety-eight degrees will not hatch, the heat may drop to that sometimes, without injury, but if it rises (say to one hundred and eight, at times,) it kills a few each time, and this has been one great cause of failure.

The eggs should be fresh, and not jarred while hatching, though a man in Louisiana had one hundred and twenty chicks from one hundred and fifty eggs bought in the general market, and some were killed by lightning, while hatching.

They are valuable as an aid, by setting all

the hens possible, and filling up their short broods, from the Incubator. A few at a time, added daily in warm weather until a Brahma or Cochin has twenty-five to forty which she can cover and care for. But when broody hens are scarce the Incubator steps in, as even if only forty per cent hatch, they are very welcome.

We want early chicks, in February if possible, but the raising is more important, and harder than the hatching and requires, warmth, cleanliness and frequent feeding.

It is well to get an Incubator some time before wanted for business, and get experience, by a few eggs hatched. Study the directions with them, and remember the best need watching, and keep the heat one degree below the normal rate for fear of a sudden rise. You may have to attend them eight or ten times a day, though some go six to ten hours without attention. The kerosene lamp, as a heater, is about the cheapest, and best, and easily regulated, as no "self-regulator" can be always depended on, in sudden changes of weather. They cost from \$28 to \$200, but small, simple ones can be home made for \$5 to \$15 and the plans we will give, if any wish them.

It is strange that two or three days before hatching the eggs bear (without injury) more moving and change of heat than at any other time.

After hatching, the first twenty-four hours they do not need food, but the next two weeks food and drink, eight or ten times daily, and the next four weeks, seven to five times, and after that, three or four times.

Put a few older chicks with them, to teach them to eat, drink and scratch, and keep them warm.

Poultry if kept in any number, need grass land and plenty of room, but other stock can be kept also, for cattle eat freely after them, if not too many fowl are kept to the acre.

Mr. Wells of Essex, England, keeps five thousand fowls on five hundred acres, and as much other stock as before he started with poultry in fact the cows prefer to be with the fowls, and the grass seems better and sweeter for them.

In closing we say, don't bother with a sick chicken or fowl, kill at once, unless very valuable, or the trouble is easily cured, like crop-bound, or cold, etc.

Some of the makers of Incubators ought to advertise in our columns, as there are a number in the United States, Canada, England, and France.

To THE inexperienced we will remark, that it is best not to try to keep too many kinds of fowls. One breed, if well cared for, is better than a dozen that will soon mix and be of no distinct kind. For all purposes, we believe the Plymouth Rock to be the best.

It may be a matter of rejoicing to the old-fashioned poultry raisers who allow their fowls only the trees as a saving of quarters, but the droppings thus lost are annually more than the cost of good crops, to say nothing of a loss of eggs for the insufficient warmth and care. It may be consoling that the trees are fertilized by the droppings, but even this is not a safe conjecture, as the exposure to sun, moisture, and winds soon deprives the manure of its ammonia which is very volatile.

**THE DAIRY.****HOW IT PAYS.**

It pays to feed well. Let me give you a case. Having a good lot of cows, which I have bred and reared myself and trained them well to be kind and gentle in every way, I do not like to part with them. But having a few more than I could well take care of this year, I rented out five of them to a neighbour. One of these cows is a cross-bred pure Ayre-shire and Jersey, and with her first calf gave eight pounds of butter in the first week's churning, with her second calf she gave twelve and one-half pounds the first week after the milk was kept (the calf was fed on skimmed milk only). This cow is now six years old and in her prime. The man complained of her and said she was a poor cow. "What feed do you give her?" "No feed at all but the pasture in the swamp meadow, and she milks only four quarts a day." I brought the cow home and she was a mere skeleton in a bag of loose skin. The first milking was three pints. I began to feed her as I knew she deserved. I gave her two quarts of fine ground corn meal and middlings mixed with cut, sweet corn fodder three times a day, with what grass the pasture would afford. The fourth day she milked nine quarts, the seventh day eleven and a-half quarts; the first four days her milk made three pounds of butter, the last three days it made four pounds seven ounces. This is not her full yield, as she is putting on flesh, and will do so until she weighs 150 or 200 pounds more than she did when she came home.

If we figure this up the profit on this feed can be shown very easily. Four quarts a day at five cents—the price at which her milk has been sold all summer—is twenty cents. That is the value of swamp meadow feeding. Eleven and a-half quarts a day is equal to fifty-seven and a half cents; the feed costs fifteen cents, so that this fifteen cents gives twenty-two and a-half cents profit. And to me the satisfaction of the thing is worth a good deal more than a dollar a day would be, for I certainly have a good deal of regard for my cows, which I have reared from the first, and each of which is a pet and regards me with evident kindness and affection. At the rate shown by these figures ten cows would return \$2.25 daily profit for the expenditure of \$1.50, which is in itself, as much as many a mechanic in a city is obliged to support his whole family upon. And yet there are farmers and dairymen who are growling every day of their lives that farming does not pay. I wish some of them would change places with some of the people in towns and cities whom they profess to envy so much. What a mistake they would make.—*N. Y. Times.*

**BUTTER MAKING.**

In skimming the cream off from milk, there should always be milk enough skimmed with the cream to give the butter, when churned, a bright, clean look. Butter churned from clear cream, with little or no milk in it, will usually have an oily or shiny look. This shows that the grain of the butter is injured, which affects the keeping qualities of the butter.

Cream skimmed from different or several

milking should never be mixed at once and churned in the same churn; but should be allowed to stand mixed from eight to ten hours before being churned. Then the cream will be as one cream, of the same chemical condition, and the butter will all come at the same time, clean from the buttermilk. If not allowed to stand after being mixed before being churned, the butter will not all come at one time in the cream. Hence a loss of a per cent. of butter in the buttermilk.

Butter should not be overworked, so as to destroy the grain, neither should there be any buttermilk left in it. I never allow my butter to be churned until it is gathered compact in the buttermilk. Stop churning when the butter is in a granulated state, then turn the buttermilk out of the churn through a sieve. A hair-sieve is the best adapted for this purpose. This leaves no waste of butter in the buttermilk, letting the butter remain in the churn. Then wash it by turning the water upon the butter. The force of the water upon the butter will separate the butter in its granulated state. Fill the churn half full or more with water, then stir up a little in the water, and you have rinsed the buttermilk out of the butter, without any working of the butter. Take the butter from off the water, using the ladle and sieve. Put the butter upon the worker, and, as you are putting on and working in the salt, you gather the butter compact for the first time.

This, you will perceive, is a saving of time and of handling of the butter up to this point. There is a difference of opinion as to the number of times that butter should be worked after salting before packing for market. I always work my butter twice after salting, even when it comes in the best possible condition. I work light, using care that my ladle or lever does not slip or slide on the butter. It wants time for the salt to dissolve and expel any and all foreign matter, and the salt will not properly dissolve unless the butter is worked a little.

**CROSS BREEDING FOR THE IDEAL DAIRY COW.**

A correspondent of the *Farmers' Gazette* (Dublin, Ireland), advocates cross breeding to produce the ideal dairy cow. His suggestions are worthy the consideration of dairymen and dairy associations in this country. He says:—

I wish I could hear of some agricultural society or dairy association offering a substantial prize for the best all-round dairy cow, being a cross between two pure breeds. We should then have a lot of breeders trying different crosses, such as Shorthorn and Jersey, Shorthorn and Dutch, Jersey and Suffolk Polled and others. At present it can't be said that we have any one breed that has all the requirements of a model dairy cow. You can get an odd Shorthorn that has all the points required, viz., size, deep milkers, milk rich in butter fat, good breeders of saleable stock, and when past milking easily fattened, and coming to a good weight. But for one that is up to this standard of quality there are ten deficient in several of these points, as for instance, too great a tendency to run to fat, too short a lacteal period, and light milkers for the size of the cow and amount of food consumed.

All our present distinct breeds are, no doubt, the result of selecting and crossing, and it is quite possible, by acting on my suggestions to find out a cross that would make a perfect dairy cow, and thus establish a new breed possessing all the necessary qualities. I believe a cross between the Shorthorn and Guernsey would come pretty close to what we want.

**HOW TO CHURN QUICKLY.**

We milk one cow, and when I have enough cream to churn I set it over my stove, high enough to keep it from scalding, but heat it well for four or five hours the evening before I churn. When I go to bed, I set it off, and leave it in the same room, where the fire does not go out. The first thing the girl does in the morning is to set it back and let it get thoroughly warmed through. Then I put hot water into the churn, and get that warm. Last week it took just two minutes, and the week before it took three minutes. The butter was sweet and nice. I never churn cream skimmed the same day, as it will not come, for want of time to "cure." Before I thus treated the cream, my girl used to churn all the forenoon, and sometimes longer, and never could succeed in getting it to come to butter. Of course we threw the warm water out of the churn before putting in the warm cream.—*Cor., Country Gentleman.*

THE art of butter-making will never reach perfection until we stop putting salt in the butter. It is a depraved taste that requires a salt taste in butter. The most critical judges in the old country never think of allowing salt to come near the butter, and after getting accustomed to it there is all the difference between the two that there is between salt and fresh fish-flesh or other dried or prepared food. The true epicure could eat a pound of unsalted butter at a sitting. It will be money in the dairyman's pocket when salt is abandoned in the dairy.—*American Dairyman.*

THE ever-recurring question of whether or not dairy-farming pays may be said to be still in an unsettled condition, and we suppose it will remain so as long as there are some men who make it pay while others do not. Then, again, the question of whether or not it pays depends very much on how you figure it. If the farmer simply makes a living, adds nothing to his farm or bank account, but keeps his land in good heart and the buildings in repair, he does make farming pay quite as well as the majority of those who live on salaries in cities and fail to put anything in the bank.—*American Dairyman.*

THE *Agriculturist* tells how to make a two-story milking-stool that presents a number of conveniences. A board the width of an ordinary stool seat, and twice the length, forms the first floor and rests on two stout legs. The two rear legs pass up through the long board and furnish two legs for the short board above that form the seat, two front legs being placed in the stool. A cleat is placed on the front edge of the long board to keep the pail, which is set on the front half of the first floor, from falling off during the process of milking. This arrangement prevents any necessity for placing the pail on the ground, and brings it nearer to the udder.



MATERNAL ANXIETY.

## HOME CIRCLE

## FARMER GORDON'S ECONOMY.

Stephen Gordon was a rich farmer. Broad acres, fertile lands, and money at interest, were his, but with all this he was always talking economy. "We must economize" in this or that or the other, was always his theme. His family consisted of a wife and three boys, and an uncle of his, an old man of more than seventy years.

One morning he entered the kitchen where his wife had just been working over butter, and had the great balls all ready for the market.

"My! Hannah! What butter! It makes a fellow's mouth water to look at it, and I've got forty cents a pound all winter; it's so much better than most folks' butter they are willing to pay a good price for't. How much have you made this month?"

"This makes forty pounds this month."

"Well that ain't bad this time of the year."

"No, but it's hard to work over so much butter by hand this cold weather. If I only had a butter-worker, it would be so much easier; it makes me so tired every time I work over ten or fifteen pounds. I don't get over it in two or three days, my arms and back are so lame. Can't I have a butter-worker, Stephen?"

"Nonsense, wife! I suppose you want me to pay five dollars for a butter-worker don't you? Why, my mother had a large dairy, and she never wanted a butter-worker—she preferred to do it with her hands and save the money, rather than spend it on every new thing that came along."

"Well, your father had more grass to mow than ever you had, and he never had a mowing-machine or a racking-machin, and you have both."

"Well; don't you see how much time and labour is saved? Why, I should have to hire twice the men I do now, if it wasn't for them."

"And don't you suppose it would save me time and strength too?"

"Well, perhaps you can have one some time, but I have got so many things to buy this spring; I've got to have a new horse and waggon, and several new fences, and I don't know what. I tell you, wife, we must economize all we can," said Stephen, as he left the room.

Yes, that was always the way when she wanted anything; perhaps she might have it sometime, but now she must economize. This her husband said five years ago when she wanted a new stove, and she was using the old cracked stove yet. It was just so about everything in the house. Her home was bare and comfortless. Didn't she economize in everything? Wasn't her own wardrobe threadbare and also that of her boys? Didn't she patch clothes until it was time wasted to patch them more? Didn't she economize in everything but her table? Oh yes?—and the little woman rattled her dishes in a way that surprised Uncle Moses in the corner. She would economize so as to make Mr. Gordon feel it.

"Hannah, you shall have a butter-worker if you want it," said Uncle Moses.

"No, uncle, I will have one but you shan't give it to me. Stephen can afford it, or I would not have asked him. I have taken too much from you already, but now I am going to economize so that I can have all I need. Husband is always taking economy to his family, but I can't see any way that he practises it himself; but he is going to."

The next day at dinner Mr. Gordon said, "I guess you forgot to put cream on this bolted ham, Hannah."

"No, I didn't forget, but I am saving my cream for butter. I must make all I can, for we must economize."

And a little later:

"I'm ready for pie now, wife. Perhaps you've got one of those nice puddings that are just what I like."

"No, Stephen I have neither. It costs a great deal to make pastry and puddings, and it takes time, too. We must economize you know."

"Papa, can't I have a sled? You said last winter perhaps I might this winter," said little Willie the six-year old.

"And can't I have a pair of skates?" said Fred a boy of ten. "It is such good skating, please buy them for me papa."

"No, indeed, boys, we must economize. I never had a sled or skates, and I guess you can do without them."

"You must have lost lots of fun, then; I'm real sorry for you," said Willie, with tears in his eyes. "I shan't let my boys go without when I'm a man."

A week passed by. In that time the Gordon family had no pastry, cakes or puddings. Now Mr. Gordon liked all kinds of sweetmeats, and it was hard for him to do without them. He craved them so much that when he went to the store he bought half-a-pound of block sugar and filled his pockets. He had never "economized" on his living, and he prided himself on setting as good a table as any one in town.

On going home one night he found the minister and his wife making a call. He was glad to see them, of course, and now he thought to himself, Hannah will have a decent supper. But what was his consternation to see, as he seated himself at the table, nothing but bread and butter, cold boiled ham and apple sauce.

"Well," said Mr. Gordon to his wife. "I am afraid the pastor will think your supper a scant one."

"I'm sorry, Stephen, but the fact is, we have been economizing lately, and they came so late that I had no time to prepare anything different."

"This delicious bread and butter needs no apology, to say nothing of the other good things," said the clergyman.

Poor Stephen! his pride was deeply hurt as he contrasted this table with others that had been spread in honour of his pastor's visit.

"Have you met with losses recently?" asked the pastor's wife with concern.

"Oh, no," said Mr. Gordon. "But in the spring, on a farm, there are a great many things wanted and we are economizing in order to meet expenses."

The next morning Mr. Gordon called on a neighbour, Mr. Jones, to pay him for a pair of young cattle.

"Here is the money for the steers," said Mr. Gordon, handing him a roll of bills.

Mrs. Jones was working over her butter in the kitchen. She had a butter-worker, and it was astonishing how fast she made the butter into cakes and stamped them, draining out every drop of butter-milk with hardly an exertion, while Mr. Gordon watched her.

"Got a butter-worker, I see."

"Yes, and don't know how I ever lived without one. It is so easy working butter now compared with what it used to be. Why, it used to make me so tired to work over so much butter, that I wasn't good for anything for two days afterwards."

"Here, wife, is twenty dollars you wanted for a cloak. Give Mr. Gordon a receipt for fifty dollars."

Mr. Gordon stared.

Twenty dollars for a cloak! When had he given his wife that sum for anything? He looked around the kitchen. Here was a model range, a sink and everything convenient and handy with which the farmer's wife could do her work. What a contrast to Hannah's kitchen? He well knew he was better able to afford such an outfit than his neighbour was.

On returning, Mr. Gordon first stopped at the barn. Here everything was in order and everything convenient to work with. Was it possible he had made Hannah do all the economizing?

In the corner of the shed was something that looked like a sled. His little boy had been trying to make one, and the words of his child rang in his ears, "I shan't let my boys go without them when I am a man."

He went into the house.

"Where is Hannah?" he enquired of Uncle Moses.

"She's gone over to see Stile's sick child."

The farmer sat down and took his paper, but his thoughts were too busy to read. He had never looked so mean in his own eyes before. He was still angry with his wife for humbling him so the night before, by giving the minister and his wife such a supper. Yet now as he thought it over, he wondered how he could have blamed her.

"Uncle Moses, how much do you think it would cost to clothe a woman for a year?"

"It's never cost much to clothe your'n," said he, his black eyes snapping. "I never thought you could have been so mean and stingy with anyone as you have been with her. She's too good for ye, and it's time ye found it out. There ye've got enough to keep her a lady, but instead of that she can't even have things to work with. Ye'll never get a cent of my fortin'. I'll settle it all on Hannah and the boys."

"That's all right. Why did you not tell me how selfish I was before?"

"Haven't I been a-tellin' ye all the time, and what good did it do? If yer stomach hadn't been pinched a little, yer never would have found out how good it was to follow what yer allers a-preachin' to her. 'We must economize.' 'We must economize.'"

"Well, I did miss the goodies, but that wasn't all the reason, and it's never too late to mend."

After dinner Mrs. Gordon went back to the dying child, and her husband harnessed up and went to town. In about two hours he returned with a tinsmith, a new stove, a new churn, and a butter-worker; a new sled for

Willie and two new pairs of skates for the other boys.

When Mrs. Gordon came home she found the children rejoicing over their presents, and Uncle Moses and Mr. Gordon busy getting tea.

"Why, where did that stove come from?" said the astonished woman, and as her eye fell upon the new churn and butter-worker, she exclaimed:—

"Why what does it mean?"

"It means that we have done 'economizing,' for the present, and that you are to have the money for yourself for all the butter you make. This is your capital to begin on," said her husband as he handed her twenty-five dollars.

After this Mr. Gordon never told his family again, 'We must economize,' and Hannah gave him no cause to do so.

PRAYING FOR PAPA.

A few nights ago a well-known citizen of this town, who has been walking for some time in the downward path, came out of his house and started down town for a night of carousal with some old companions he had promised to meet. His young wife had besought him with imploring eyes to spend the evening with her, and had reminded him of the time when evenings passed in her company were all too short. His little daughter had clung about his knees and coaxed in her pretty wilful way for "papa" to tell her some bed-time stories, but habit was stronger than love for wife and child, and he eluded their tender questioning by the special sophistries the father of evil advances at such time from his credit fund, and went his way. But when he was blocks distant from his home he found that in changing his coat he had forgotten to remove his wallet, and he could not go on a drinking bout without money, even though he knew that his family needed it, and his wife was economizing every day more and more in order to make up his deficits, and he hurried back and crept softly past the windows of the little home in order that he might steal in and obtain it, without running the gauntlet of either questions or caresses. But something stayed his feet; there was a fire in the grate within—for the night was chill—and it lit up the little parlour, and brought out in startling effects the pictures on the wall. But these were as nothing to the picture on the hearth. There, in the soft glow of the firelight, knelt his child at her mother's feet, its small hands clasped in prayer, its fair head bowed; and as its rosy lips whispered each word with childish distinctiveness, the father listened, spell-bound to the spot:

"Now I lay me down to sleep,  
I pray the Lord my soul to keep;  
If I should die before I wake,  
I pray the Lord my soul to take."

Sweet petition! The man himself, who stood there with bearded lips shut tightly together, had said that prayer once at his mother's knee. Where was that mother now? The sunset gates had long ago unbarred to let her pass through. But the child had not finished; he heard her "God bless mamma, papa, and my own self." Then there was a pause, and she lifted troubled blue eyes to her mother's face.

"God bless papa," prompted the mother, softly.

"God bless papa," lisped the little one.

"And—please send him home sober"—he could not hear the mother as she said this, but the child followed in a clear inspired tone:

"God—bless papa—and please—send him—home—sober. Amen." Mother and child sprang to their feet in alarm when the door opened suddenly; but they were not afraid when they saw who it was, returned so soon. But that night, when little Manie was being tucked up in bed, after such a romp with papa, she said in the sleepest and most contented of voices:

"Mamma, God answers most as quick as the telephone, doesn't He?"—*New York Journal.*

FATHERS AND SONS.

I must look to the sheep in the fold,  
See the cattle are fed and warm;  
So Jack, tell mother to wrap you well,  
You may go with me over the farm,  
Though the snow is deep and the weather cold,  
You are not a baby at six years old.

Two feet of snow on the hill-side lay,  
But the sky was as blue as June;  
And father and son came laughing home  
When dinner was ready at noon—  
Knocking the snow from their weary feet,  
Rosy and hungry and longing to eat.

"The snow was so deep," the farmer said,  
"That I feared I could scarce get through."  
The mother turned with a pleasant smile:  
"Then what could a little lad do?"  
"I trod in my father's steps," said Jack;  
"Wherever he went I kept his track."

The mother looked in the father's face;  
And a solemn thought was there;  
The words had gone like a lightning flash  
To the seat of a nobler care:  
"If he 'tread in my steps,' then day by day  
How carefully I must choose my way!"

"For the child will do as the father does,  
And the track that I leave behind,  
If it be firm, and clear, and straight,  
The feet of my son will find.  
He will tread in his father's steps, and say:  
'I am right, for this was my father's way.'"

Oh! fathers leading in Life's hard road,  
Be sure of the steps you take;  
Then the sons you love, when gray-haired men,  
Will tread in them still for your sake.  
When grey-haired men to their sons will say:  
"We tread in our father's steps to-day."  
—*Lillie E. Barr, in N.Y. Ledger.*

STRENGTH AND WEAKNESS.

These two figures, I say, are everywhere; they are confronting each other in every Valley of Elah all over the world; the power of confident strength and the power of weakness reliant upon God. Goliath may thank his gods for his great muscles; it is a strength that has been handed over to him by them; but it is a strength that has been so completely handed over to him that he now thinks of it, boasts of it, uses it, as his. David's strength lies back of him in God, and only flows down from God through him as his hand needs it for the twisting of the sling that is to hurl the stone. O, how the multitude stand waiting round every Valley of Elah where a David and a Goliath meet! How the Philistines shout for the battle as they see their champion step forth! How the Israelites tremble and their hearts sink when they see how weak their shepherd-boy looks! How the Philistines turn and flee when they see their giant fall! How the Israelites first gaze astonished, and then surround him with shoutings, as David comes

back with the head of the Philistine in his hands! And yet how the same scene is repeated over and over again forever; the arrogance of the Philistines and the timidity of the Israelites whenever a new power, confident in self, meets weakness reliant upon God.—*Rev. Phillips Brooks.*

A DENTIST ON THE PRESERVATION OF THE TEETH.

"Doctor, are not a great many teeth ruined by having the enamel worn off with tooth powders?"

"No; that is a most pernicious fallacy. I wish all this world knew the truth, that the enamel of a tooth cannot be worn off with a brush and any kind of tooth powder; not if it were scrubbed for five hours a day for 150 years. More teeth are ruined by a fear of scouring them than by all other causes put together. The best way in the world to preserve a tooth is to keep it highly polished; then no foreign substance adheres to it. These adhesions and gradual rustings are what destroy teeth. If you wish to keep a piece of steel you polish it. If you do not it will rust away. It is precisely the same with a tooth. The only danger that can arise from the use of the harshest tooth powders is that they may injure the gums. Don't ever use charcoal or salt, for, while they are excellent for cleaning, they are ruinous to the gums. Charcoal is full of little, sharp slivers that get under the gums or cut into them and cause trouble; and grains of salt, you know, have very sharp edges and corners. Cuttlebone tooth powders are the best, I think. But by all means keep the teeth clean and highly polished. That reminds me," continued the dentist, "a handsome and well-dressed lady came here yesterday and wished her teeth 'fixed up.' I looked into her mouth and saw about the foulest chasm I ever gazed into. Why, it was worse than a sewer. I told her I would give her a prescription, and when she had used it thoroughly for a week I would see her again. The prescription was for a tooth brush and a box of powder. Doubtless she was vexed when the druggist 'compounded' it, but it was what she most needed, nevertheless."

"I have heard that many medicines given by the physicians injure the teeth. Is that true, doctor?"

"No, not to any considerable extent. I'll tell you where that idea comes from. You know, when a person's sick he isn't so apt to clean his teeth as when he is well. That is one trouble; but a greater is that the teeth are not used much. Sick persons eat but little, usually; and what they do eat is often in the form of pastes or gruels that do not demand much chewing. Now, the teeth are like any other part of the person; if they are unused they become soft and more subject to the decaying influences. Put your arm in a sling for a month and the muscles and whole member will become soft and flabby. So with a tooth that is not used for some time. Now, when a tooth is growing softer each day, and it is not being cleaned as often as it was when it needed cleaning less, of course it rapidly fails. This is why the medicines are charged with the destruction."

GET a few quires of blotting-paper, and sprinkle the sheets with the perfume desired; then put them under a weight until they become dry. When dry, put note-paper, envelopes, etc., between the sheets, and place them under a weight for a few hours. When removed, they will be found perfumed. The blotting-sheets may be utilized again, and can be made to retain their perfume for a long time by keeping them from exposure to air.

# Send Me a Rose From My Angel Mother's Grave.

## SONG AND CHORUS

Words by FRANK DUMONT.

Music by W. S. MULLALY.

*Andante.*

*p* *ff*

1. I've been think - ing, to - day, of the hap - py years a - go, And the tears quick - ly gath - er'd in my eyes, As I  
 2. I would give all this world, if it were mine to give, If my moth - er could re - turn to me a - gain; I would

*p*

held with - in my hand, a por - trait and a flow'r, Tok - ens bound to me by ma - ny sa - cred ties. The  
 strive then to re - pay her ma - ny acts of love, For my heart is call - ing, and it calls in vain. Nev - er

pic - ture is my mother's, and she sent it 'cross the sea, And a bless - ing to her wand'ring son she gave; And this  
 more to feel her kiss - es and her words of brightest cheer, When she bade me hope, be patient, true, and brave; And I

*rall.* *pp a tempo.*

lit-tle fad-ed flow-er blos-som'd on the gras-sy mound, For they sent me a rose from moth-er's grave.  
keep my lit-tle flow-er ev-er near, where e'er I go, For it blossom'd on my an-gel moth-er's grave.

*rall.*

CHORUS.

1st. Tenor. *ff*

When you kneel down in pray'r near the spot where she's laid, Re-mem-ber this fav-or that I crave; Oh!

2nd Tenor.

When you kneel down in pray'r near the spot where she's laid, Re-mem-ber this fav-or that I crave; Oh!

Alto. *ff*

When you kneel down in pray'r near the spot where she's laid, Re-mem-ber this fav-or that I crave; Oh!

Bass.

When you kneel down in pray'r near the spot where she's laid, Re-mem-ber this fav-or that I crave; Oh!

*ff*

Take from the hol-y ground a blos-som from the mound, And send me a rose from moth-er's grave.

Take, yes, take a blos-som from the mound, And send me a rose from moth-er's grave.

Take, yes, take a blos-som from the mound, And send me a rose from moth-er's grave.

Take, yes, take a blos-som from the mound, And send me a rose from moth-er's grave.

*p* *ff*

Send Me a Rose, etc.

## YOUNG CANADA.

### HOW A BEAR CAUGHT FISH.

Very few people, says a Maine paper, know that bears take to water naturally. They roam over the mountains and through the forests, dig open rotten logs for ants and worms and secure all the hornet's nests they can, and tear them to pieces and eat the young grubs, pick berries of all descriptions and eat them, and would seem to belong to the dry land animals. The fact is different. They love the water, not, perhaps as well as the moose and deer, but better than most dry land animals.

They are very fond of fish, and are expert fishermen, and they show more cunning and instinct, if not reason than many city chaps I have seen fishing about the lakes.

I came once suddenly upon a large bear in a thick swamp, lying upon a large hollow log across a brook, fishing, and he was so much interested in his sport that he did not notice me until I had approached very near to him, so that I could see exactly how he baited his hook and played his fish. He fished in this wise:

There was a large hole through the log on which he lay, and he thrust his forearm through the hole and held his open paw in the water, and waited for the fish to gather around and into it, and when full he clutched his fist and brought up a handful of fish, and sat and ate them with great gusto; then down with the paw again! and so on. The brook was fairly alive with little trout and red-sided suckers, and some black suckers, so the old fellow let himself out on the fishes. He did not eat their heads. There was quite a pile of them on the log. I suppose the oil in his paw attracted the fish and baited them even better than a fly hook, and his toe nails were his hooks, and sharp ones too, and once grabbed the fish are sure to stay.

They also catch frogs in these forest brooks, and drink of the pure water in hot summer days and love to lie and wallow in the muddy swamps as well as our pigs in the mire. They often cross narrow places in lakes by swimming and also rivers, and seem to love to take a turn in the water. I once saw one swimming from the mainland to the big island in Mooselmaguntic Lake, with just a streak of his back out of the water, looking like a log moving along. Sometimes you see only their heads out of water; at other times half of their bodies are to be seen. We account for this difference by their condition. If fat the grease helps to buoy them up; if lean, they sink lower in the water.

### ANIMALS FOR CHILDREN.

If you introduce a new cat, or dog, or bird into a nursery, where a group of children are playing with dolls, or building blocks, or tin soldiers—everything is at once deserted for the living creature, which must be admired, and caressed, and fed, and is an object of never ceasing interest. Even a homely bull dog will thus come to be loved; and we have known one which was worthy of all the affection bestowed upon him, and showed in return the most perfect fidelity and gentleness toward

the little people who used to play with him.

Of course, in selecting animals which are to be pets and playmates of children, it is exceedingly important to choose those which may be relied upon to be always faithful and friendly.

By their early acquaintance with animals thus obtained, children unconsciously acquire considerable knowledge of natural history, and their experience with their pets is not only a pleasure in itself, but a step in education.

#### THE PRICE OF A DRINK.

"Five cents a glass!" does any one think,  
That that is really the price of a drink?  
"Five cents a glass," I hear you say;  
"Why that isn't very much to pay."  
Oh, no, indeed, 'tis a very small sum  
You are passing over 'twixt finger and thumb,  
And if that were all that you gave away,  
It wouldn't be very much to pay.

The price of a drink? let him decide  
Who has lost his courage and lost his pride,  
And lies a grovelling heap of clay,  
Not far removed from a beast to-day.  
The price of a drink? Let that one tell,  
Who sleeps to-night in a murderer's cell,  
And feels within him the fires of hell,  
Honour and virtue, love and truth,  
All the glory and pride of youth,  
Honour of manhood, the wreath of fame,  
High endeavour, and noble aim—  
These are the treasures thrown away,  
As the price of a drink from day to day

"Five cents a glass!" how Satan laughed,  
As o'er the bar the young man quaffed,  
The beaded liquor, for the demon knew  
The terrible work that drink would do;  
And before the morning the victim lay,  
With his life-blood swiftly ebbing away;  
And that was the price he paid, alas!  
For the pleasure of taking a social glass.

The price of a drink! if you want to know  
What some are willing to pay for it, go  
Through the wretched tenement over there,  
Where dingy windows and broken stairs,  
Where foul disease, like a vampire crawls  
With outstretched wings o'er the mouldy walls.  
There Poverty dwells with her hungry brood,  
Wild-eyed as demons for lack of food;  
There Shame, in a corner crouches low,  
There Violence deals its cruel blow;  
And innocent ones are thus accursed,  
To pay the price of another's thirst.

"Five cents a glass!" Oh, if that were all,  
The sacrifice would indeed be small;  
But the money's worth is the least amount  
We pay; and whoever will keep account,  
Will learn the terrible waste and blight  
That follows this ruinous appetite.  
"Five cents a glass!" Does any one think  
That that is really the price of a drink?

#### THE NEST IN THE MAIL-BOX.

We had to fasten a box for our mail on the gate-post, because the postman is afraid of our dog, and will not come into the yard. Last summer two little bluebirds made a cunning nest right in the box.

The mamma bird laid five tiny eggs, and sat on them, letting the postman drop the letters on her. Every morning and evening the newsboy put in the paper.

Papa bird brought her worms, and mamma, sister, and I used to watch him. He would never go in the box while we looked on, and when we walked away he would drop down as quick as a flash.

By-and-by there were five little birds in the nest. We thought the letters and papers would surely kill them. But they did not; the birds grew finely. Their mouths were always wide open. One day I put some fine crumbs in the nest, thinking they would like to eat. I wish you could have seen mamma bird. She flew around, acting as if crazy. Finally she began taking out the tiny crumbs one by one, until the last one was thrown

away. I had seen pictures of children feeding crumbs to birds, and thought it the right thing to do. But surely it was not the food these birds needed. For several weeks we watched them, and saw them grow.

We wanted to see the mamma teach them to fly. But they all left suddenly. The nest was empty one day, and we could never tell our birds from the others in the yard. I brought the nest into the house and kept it all winter. We wondered if we should see the little birds again the next year.

At the opening of spring we watched closely, and sure enough the bluebirds did come again, and built a nest in the same box. This time they made a better foundation, raised the nest higher up, lined it with horse-hair, and put it in one corner of the box. Then the mamma bird laid five little eggs, and we and they were happy. One day we missed an egg. The next day another was gone, and then another, until only one was left. We found that some bad boys had discovered the nest and were stealing the eggs. Finally the boys took the last one; then we felt so sorry, and thought we should see the birds no more. But they did not give up. They at once tore to pieces the old nest, and built a new one in another corner. Four more little eggs were laid in it. The bad boys took two of those out. Then papa and I locked the box. I thought the mamma bird might be so frightened she would not want to stay on the nest. But she did stay; and now we have two little baby birds which open their mouths wide and squirm whenever we raise the cover of the box.

#### BOYS, CAN YOU TELL?

Boys should never go through life satisfied to be always borrowing other people's brains. There are some things they should find out for themselves. A farmer's boy should discover for himself what timber will bear the most weight, what is the most elastic, what will last longest in the water, what out of the water, what is the best time to cut down trees for firewood? How many kinds of oaks grow in your region, and what is each specially good for? How does a bird fly without moving a wing or a feather? How does a snake climb a tree or a brick wall? Is there a difference between a deer's track and a hog's track? What is it? How often does a deer shed his horns, and what becomes of them? In building a chimney, which should be the largest, the throat or the funnel? Should it be wider at the top or drawn in? The boys see many horses. Did they ever see a white colt? Do they know how old the twig must be to bear peaches, and how old the vine is when grapes first hang upon it? There is a bird in the forest which never builds a nest, but lays her eggs in the nests of other birds. Can the boys tell what bird it is? Do they know that a hop vine always winds with the course of the sun, but a bean vine always winds the other way? Do they know that when a horse crops grass he eats back towards him; but a cow eats outward from her, because she has no teeth upon her upper jaw, and has to gum it?

The rock on which many a constitution goes to pieces is Dyspepsia. The loss of vigour which this disease involves, the maladies which accompany it, or which are aggravated by it, the mental despondency which it entails, are terribly exhaustive of vital stamina. Its true specific is Northrop and Lyman's Vegetable Discovery and Dyspeptic Cure, which likewise overcomes bilious maladies, female ailments, and those coupled with impurities of the blood.

**DILL'S CHOICE FLOWER SEEDS**  
Over 100 Varieties.

Annuals, Perennials, Climbers, Everlastings, 14 packages 50 cents; Beat Pansy, 10 cents. Pump packages mix seeds for wild garden 10 cents; roots Hardy Phlox, 5 bars 40 cents; Honey-suckles, Scarlet, Trumpet, etc., 2 for 25 cents; Lemon Lily and Double Tiger, 2 for 35 cents. Dill, Mich., Box 237; (Mrs. M. A. Fuller) Fentonville, Genesee Co.

High Superb 40 cents per 100, \$3 per 1,000; James Viole, 40 cents per 100, \$2.50 per 1,000; Daniel Boone, \$2 per 100; Burpee Welcome Oats, 1 peck \$1, half-bushel \$3; O K Mammoth Prolific Potatoes, peck 50 cents, half bushel 75 cents, bushel \$1.25.

By freight or express.  
**JAMES LIPPINCOTT, JR.**  
Mount Holly, N. J.

**\$3 FOR 50 CENTS.**

Our new portrait of Lord Lansdowne (size 2 1/2 x 3 1/2) is good value at \$1.00. Also that of Sir John A. Macdonald—a remarkable likeness. Our new book, "Guide to Dressmaking and Fancy Work," is a cheap book at 50 cents. These two portraits and a copy of "Dressmaking," together with our **OWN PAPER** for one year for 50 cents. The offer is a special one to increase our subscription list to 10,000, and we do not promise to repeat it.

J. S. ROBERTSON & BROS.  
(Established 1874.) Toronto and Whitby.

**PATENTS Hand-Book FREE.**  
R. S. & A. P. LACEY,  
Patent Attys, Washington, D. C.

**A BOON TO MEN**

All those who from indolence, excess or other causes are weak, unclean, low-spirited, physically drained and unable to perform their duties properly, can be cured by the permanent cure, without steam medicine. Endorsed by doctors, ministers and the press. *The Medical Weekly* says: "The only plan of treating Nervous Debility, Physical Poverty, etc., is wisely suggested by R. S. & A. P. LACEY, D. C. A few bottles cause assured of certain restoration to full and perfect health. Simple, effective, clean, pleasant. Send for treatise. Consultation free."  
MARSTON KINZIE CO., 75 Yonge St., Toronto, Ont.

**GRAPE VINES.**

Nursery established 27 years. Over 100 varieties. Also, Strawberries, Raspberries, Currants, etc. Prices low. Quality best. Cash on order. C. W. Campbell, Delaware, Ohio.

**PATENTS NO PATENT, NO PAY.**  
R. S. & A. P. LACEY,  
Attorneys, Washington, D. C.  
Full instructions and Hand-Book of Patents sent free.

**MONARCH HORSE HOE**  
AND CULTIVATOR COMBINED



For Hoed & Hilling Potatoes, Corn, Onions, Beets, Cabbages, Turnips, etc.  
**SENT ON 30 Days' TRIAL**

An immense saving of labor and money. We guarantee a boy can cultivate and hoe and hill potatoes, corn, etc. 15 times as fast as any man can the old way.  
**WANTED: Agents for this paper. Address: Monarch Mfg. Co., 206 State St., Chicago, Ill.**

**THE OLD RELIABLE**  
**Halladay Standard**  
**WINDMILL.**

28 YEARS IN USE. GUARANTEED SUPERIOR TO ANY OTHER MAKE. 17 SIZES, 1 TO 40 HORSE-POWER.

For Pumping, Grinding Feed, Sawing Wood, Running Straw Cutters, Root Pulpers, or Any Other Machinery.

Also manufacturers of I X L. Ford Mills, to be operated by the above or any other power, and will grind from six to twenty-five bushels per hour, according to size. Also, **Noyes' Haying Tools**. Pumps, wood or iron, for deep wells, a specialty. Sole Agents in Canada for the U. S. Wind Engine and Pump Co., of Batavia, Ill. The most extensive manufacturers of Windmills in the world. Also, Agents for "Kuewies' Steam Pumping Machinery." We send free to all the most complete and extensive, illustrated Catalogue ever published in the above line. Write your name and address on a post-card, and mail to

**Ontario Pump Co.,**  
TORONTO, ONTARIO.

**NEW Vegetables Speciality**  
**GREGORY'S SEED CATALOGUE**  
1884-1884

My Vegetable and Flower Seed Catalogue for 1884, the result of thirty years' experience as a Seed Grower, will be sent free to all who apply. All my seeds are warranted fresh and true to name, so far that should it prove otherwise, I agree to refund the price. My list of vegetables is one of the most extensive to be found in any American Catalogue. It is a large part of it my own growing. As the original introducer of **Pollock's Beet**, **Hubbard Squash**, **Marblehead Early Corn**, the **Hubbard Squash**, and scores of other new vegetables, I invite the patronage of the public. In the gardens and on the farms of those who plant my seed will be found my best advertisement.  
**JAMES J. H. GREGORY, Seed Grower, Marblehead, Mass.**

**Burdock BLOOD BITTERS**

Cures Dizziness, Loss of Appetite, Indigestion, Biliousness, Dyspepsia, Jaundice, Affections of the Liver and Kidneys, Pimples, Blotches, Boils, Humors, Salt Rheum, Scrofula, Erysipelas, and all diseases arising from Impure Blood, Deranged Stomach, or irregular action of the Bowels.

**Peter Henderson & Co's SEEDS & PLANTS**  
A COLLECTION OF

embraces every desirable novelty of the season, as well as all standard kinds. Special feature for 1884 is, that you can for \$5.00 select Seeds or Plants to that value from their Catalogue, and have included, without charge, a copy of Peter Henderson's New Book, "Garden and Farm Topics," a work of 230 pages, handsomely bound in cloth, and containing a steel portrait of the author. The price of the book alone is \$1.00. Catalogue of "Everything for the Garden," giving details, free on application.

**PETER HENDERSON & CO. SEEDSMEN & FLORISTS,**  
35 & 37 Cortlandt St., New York.

**30 DAYS' TRIAL**  
**DR. DYES'**

**ELECTRO-VOLTAIC BELT** and other **ELECTRIC** APPLIANCES sent on 30 Days' TRIAL TO ALL YOUNG OR OLD, who are suffering from NEURALGIA, RHEUMATISM, LAMENESS, WASTING WEAKNESSES, and all other DISEASES of a PERSONAL NATURE, resulting from ACIDITY and OTHER CAUSES. Speedy relief and complete restoration to HEALTH, VIGOR and MASHOOD GUARANTEED. Sent at once for Illustrated Pamphlet free. Address  
**VOLTAIC BELT CO., Marshall, Mich.**

Prof. Low's Magic Sulphur Soap is highly recommended for all humors and skin diseases

**PREBYTERIAN**  
**Normal Class Teacher,**  
OR A  
**PREPARATORY COURSE OF STUDY,**

Designed to help the present and future Christian worker in the Church as a larger grasp of the Word of God, and to aid in preparing them for the important office of Sabbath School Teachers.

BY REV. JOHN McEWEN.

Every Sabbath School Teacher, as well as every intending teacher, should have a copy of this work.

Price 25 cents; in cloth, 50 cents. Mailed to any address free of postage.

**C. BLACKETT ROBINSON**  
5 York St., Toronto

Mrs. Mary Thompson, of Toronto, was afflicted with Tape Worm, 8 feet of which was removed by one bottle of Dr. Low's Worm Syrup.

**CARTER'S**  
**LITTLE LIVER PILLS.**

**CURE**

Sick Headache and relieves all the troubles incident to a bilious state of the system, such as Dizziness, Nausea, Drowsiness, Distress after eating, Pain in the Side, &c. While their most remarkable success has been shown in curing

**SICK HEADACHE**

Headache, yet Carter's Little Liver Pills are equally valuable in Constipation, curing and preventing this annoying complaint, while they also correct all disorders of the stomach, stimulate the liver and regulate the bowels. Even if they only cure a

**HEAD**

Ache they would be almost priceless to those who suffer from this distressing complaint; but fortunately their goodness does not end here, and those who once try them will find these little pills valuable in so many ways that they will not be willing to do without them. But after all sick head

**ACHE**

Is the bane of so many lives that here is where we make our great boast. Our pills cure it while others do not.

Carter's Little Liver Pills are very small and very easy to take. One or two pills makes a dose. They are strictly vegetable and do not gripe or purge, but by their gentle action, please all who use them. In vials at 25 cents; five for \$1. Sold by druggists every where, or sent by mail.

**CARTER MEDICINE CO.,**  
New York City.

265TH EDITION. PRICE ONLY \$1  
BY MAIL POST-PAID.

**THE SCIENCE OF LIFE**

**KNOW THYSELF.**  
A Great Medical Work on Manhood

Exhausted Vitality, Nervous and Physical Debility, Premature Decline in Man, Errors of Youth, and the untold miseries resulting from indiscretion or excesses. A book for every man, young, middle-aged and old. It contains 125 prescriptions for acute and chronic diseases, each one of which is invaluable. So found by the Author, whose experience for 23 years is such as probably never before fell to the lot of any physician. 300 pages, bound in beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for \$2.50, or the money will be refunded in every instance. Price only \$1.00 by mail, post-paid. Illustrative sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he is President.

This book should be read by the young for instruction, and by the afflicted for relief. It will benefit all.—*London Lancet.*

There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argosy.*

Address the Peabody Medical Institute, or Dr. W. H. P. Atter, No. 4 Bullfinch Street, Boston, Mass., who will be consulted on all diseases requiring skill and experience. Chronic and hereditary diseases that have afflicted the skill of all other physicians a specialty.

Such treated successfully without an instance of failure.

**HEAL THYSELF**

**Special Offer For 30 days** **THE BEST ELECTRIC BELT MADE ONLY \$1**

Having obtained the sole right to sell the German Electro-Galvanic Belt in America from the inventor, Prof. Conrad Lehmann of Berlin, we are determined that every one who is afflicted with any of the following ailments shall be able to purchase them here at once. The price of the Belt has always been Six Dollars (\$6.00), but to induce invalids to give it a trial we will, for the next ninety days, send the German Electro-Galvanic Belt for ONE DOLLAR, provided you will cut out and send us the enclosed coupon and give us your written promise to recommend the Belt if you find it successful. This is without doubt the best, strongest, and most sensibly constructed Electro-Galvanic Belt ever introduced. Being the invention of the great German Scientist, Prof. Lehmann, and has met with the most marvelous success in Europe being recommended and endorsed by the entire Medical Profession of Germany. The inventor has in his possession letters from Prince Bismarck and several members of the Royal Family. A quarter of a million of them were sold in the German Empire last year. These belts, unlike many so-called cheap appliances, are very light and not disagreeable to wear, and generate a current that is immediately felt in their action. (See nothing) can be done for the Stomach, Liver, Kidneys and Nervous System to act as nature intended they should. Curing thousands of cases of indigestion, biliousness, constipation, and all other ailments. Under no circumstances can it do any harm and will do good to every man who is afflicted with any of the above ailments. They are made of cloth, gutta serena, and the latest improvements are incorporated in their construction.

**This Coupon is worth \$5.00.**  
If you will cut out this Coupon and send it to us with ONE DOLLAR in a registered letter we will send you the best belt by return mail. One GERMAN ELECTRO-GALVANIC BELT with full instructions in both English and German. Write name and full name of address very plainly, and give your own name in the enclosed.

**FORREST & CO., Sole Agents,**  
116 Nassau Avenue, Street 11th, N.Y.

DEALER AT ONCE from the Manufacturer. Money saved by correspondence. Goods sent by express. Carriers in Canada and England. Address: 116 Nassau Avenue, Street 11th, N.Y.

**Country Newspaper PROPRIETORS.**

For Sale, a **DOUBLE ROYAL HOG STOP - CYLINDER PRESS**, adapted for News, Book-work, or General Jobbing. Fitted for hand and steam. Speed, 1,000 per hour. Size of bed between rollers 22" x 27". Will register with or without points.

For terms or any further particulars, address  
**C. BLACKETT ROBINSON,**  
5 Jordan Street, TORONTO

**DR. W. SMITH'S**  
ENGLAND, SPECIALIST.

Nervous Debility in all its various forms and Private Diseases in all their different stages successfully treated. Dr. Smith has an extensive experience of over 20 years in the Hospitals of London and Paris, and can be consulted from 10 am. to 1 p.m., 3 to 5, and 7 to 9 p.m., on all diseases of a private nature requiring skill and experience. Letters forwarded when necessary enclosed. Offices:  
381 King St. West, TORONTO.

# NEW SPRING MILLINERY.

We are showing an immense variety of Trimmed Hats and Bonnets, Flowers, Feathers, etc., and at remarkably low prices.

Our display of Handsomely Trimmed Bonnets, Hats, and all kinds of Untrimmed Goods is superior to any in the city, to which the large number of ladies who attended our opening can testify.

The many elegant Mantles which we are showing cannot be compared with in the city, either for style or value.

We request the large number of ladies who have not already done so, to visit our Millinery Show Rooms, and we feel convinced that they will say, one and all, that for style and value no house on this continent can compare with

## PETLEY & PETLEY,

The Handsomest and Best Fitted-Up Show Room in Canada

### ELEGANT NEW CARPETS.

We are showing an immense variety of magnificent Wilton, Aubusson, Axminster, Brussels, and Tapestry Carpets, and at astonishingly low prices.

Best Axminster Carpets only \$1.40 per yard.

Best Wilton Carpets only \$1.60 per yard.

Best Brussels Carpets only \$1 per yard.

Tapestry Carpets at 30c., 35c., 40c., 45c., 50c., 55c., and 60c. per yard and up.

No housekeeper or intending buyer should make a purchase without paying a visit to

*Handwritten signature*

## PETLEY & PETLEY,

THE LEADING CARPET DEALERS,

128 TO 132 KING STREET EAST, TORONTO.

### WHAT IS CATARRH?

(From the Toronto (Canada) "Mail")

Catarrh is a mucopurulent discharge caused by the presence and development of the vegetable parasite ameba in the internal lining membrane of the nose. This parasite is only developed under favorable circumstances, and these are: Mucoid state of the blood as the lightest corpuscle of tubercle, the germ of syphilis, mercury, toxemia, from the retention of the effete matter of the skin, suppressed perspiration, badly ventilated sleeping apartments, and other poisons that are kept in the blood. These poisons keep the internal lining membrane of the nose in a constant state of irritation, ever ready for the deposit of the seeds of these germs, which spread up the nostrils and down the fauces, or back of the throat, causing ulceration of the throat; up the Eustachian tubes, causing deafness; narrowing in the vocal cords, causing hoarseness; usurping the proper structure of the bronchial tubes, ending in pulmonary consumption and death.

Many attempts have been made to discover a cure for this distressing disease by the use of inhalants and other ingenious devices, but none of these treatments can do a particle of good until the parasites are either destroyed or removed from the mucous tissue.

Some time since a well-known physician of forty years' standing, after much experimenting, succeeded in discovering the necessary combination of ingredients which never fails in absolutely and permanently eradicating this horrible disease, whether standing for one year or forty years. Those who may be suffering from the above disease should, without delay, communicate with the business managers, Messrs. A. H. DIXON & SONS, 305 King Street West, Toronto, and get full particulars and treatise free by enclosing stamp.

What the Rev. E. B. Stevenson, B. A., a Clergyman of the London Conference of the Methodist Church of Canada, has to say in regard to A. H. Dixon & Sons' New Treatment for Catarrh.

New Treatment for Catarrh.

Messrs. A. H. DIXON & SONS: I have tried so many things for catarrh, suffered so much and for so many years, that it is hard for me to realize that I am really better. I confess that mine was a very bad case. It was aggravated and chronic, involving the sinuses as well as the nasal passages, and I thought I would require the three treatments, but feel fully cured by the two sent me, and I am thankful that I was ever induced to send to you.

You are at liberty to use this letter, stating that I have been cured at two treatments, and I shall gladly recommend your remedy to some of my friends who are sufferers. Yours, with many thanks, REV. E. B. STEVENSON.