

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Covers damaged/
Couverture endommagée

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Cover title missing/
Le titre de couverture manque

Coloured maps/
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:
Commentaires supplémentaires:

Coloured pages/
Pages de couleur

Pages damaged/
Pages endommagées

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Pages detached/
Pages détachées

Showthrough/
Transparence

Quality of print varies/
Qualité inégale de l'impression

Continuous pagination/
Pagination continue

Includes index(es)/
Comprend un (des) index

Title on header taken from:/
Le titre de l'en-tête provient:

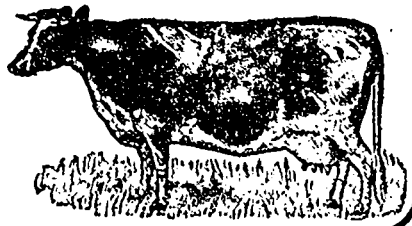
Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X



DECEMBER
15, 1890.



The



Maritime ♦ ♦ Agriculturist.

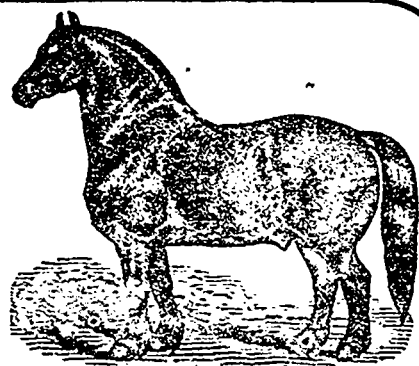
Devoted to the Interests of the Farmers, Stock-Breeders and
Horsemen of the Maritime Provinces of Canada.

JOHN A. BOWES,
PUBLISHER,
SAINT JOHN, N. B.

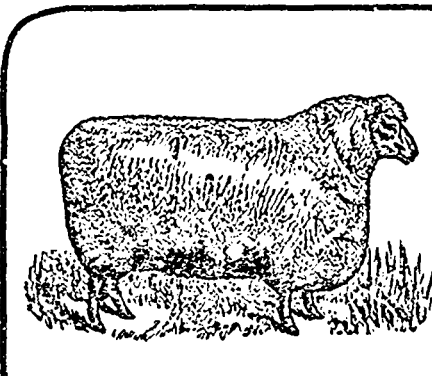
ISSUED SEMI-MONTHLY.



\$1.00 per Year, in Advance.



VOL. 2.
NO. 19.



THE MARITIME AGRICULTURIST.

Devoted to the Interests of the Farmers, Stock Breeders and Horsemen of the Maritime Provinces of Canada.

VOL. 2.

ST. JOHN, N. B., DECEMBER 15, 1890.

NO. 19

The Maritime Agriculturist.

Published Semi-Monthly at St. John, N. B.

Subscription—\$1 per annum, strictly in advance.
SINGLE COPIES 5 cents. Specimen copies free.
LIBERAL REDUCTION to Clubs.
ADVERTISING RATES made known on application.
CORRESPONDENCE solicited from all parts of Nova Scotia, New Brunswick and Prince Edward Island upon subjects of interest to the general reader. Notices of transfer of pure bred stock inserted as correspondence. All copy must be sent one week before the date of the issue in which it is to appear.
REMITTANCES may be made by registered letter or money order.
ALL communications should be addressed to "The Maritime Agriculturist," St. John, N. B.

JOHN A. BOWES, - - - PUBLISHER,
ROBT. JARVIS GILBERT, - MANAGER.

CONTENTS.

Publisher's Announcement.....	289
Make a Little Experiment.....	289
Items of Interest.....	289
Pony Breeding.....	290
The Jersey.....	290
Heroin Remembered.....	290
Register the Milkers.....	291
Warm Water vs. Ice Drinks.....	291
The Cutter and Grinder.....	291
Dishorning.....	291
Destroying Alder Bushes.....	291
Trotters for the Farmer.....	292
The McKinley Bill.....	293
Kentucky Horses.....	293
The November Crop Bulletin.....	294
Our Trade in Agricultural Produce.....	294
Sea Weed.....	295
In and In-Breeding.....	295
Trade with England.....	295
The Potato Disease.....	296
The Silo.....	297
The Kite Shaped Track.....	298
The Gold Medal Farm.....	299
Stock Notes.....	299
Beltered Water Troughs.....	299
Poultry Notes.....	299
Butter.....	300
Jottings.....	300

==JOB== PRINTING

OF EVERY DESCRIPTION

—done at the office of—

The Maritime Agriculturist.

STOCK BREEDERS, wanting catalogues printed should note this.

PUBLISHER'S ANNOUNCEMENT.

The proprietorship of the MARITIME AGRICULTURIST has changed hands and in future it will be issued from the office of THE EVENING GAZETTE, St. John, N. B. It will continue as before under the management of Robert Jarvis Gilbert, who has been associated with the publication since its commencement. The change in proprietorship and the removal of the headquarters of the paper from Dorchester to St. John explains the delay in the issue of the current number. Hereafter the MARITIME AGRICULTURIST will appear regularly on the 1st and 15th of each month.

Many changes and improvements will be made and the aim of the publisher will be to make the MARITIME AGRICULTURIST not only a first-class farmer's paper, but to fill its columns with matter particularly adapted to the farming interests of the lower provinces. Performance is better than promises, and all that is asked is a fair and reasonable support from the farmers of the Maritime Provinces.

JOHN A. BOWES, Publisher.

Make a Little Experiment.

If you are not convinced of the practicability of the silo make a test for yourself. Build a small one four or five feet square and sixteen or eighteen feet deep. Plant some crop especially for it next spring and next winter feed it to one cow or a few sheep. This will not cost you much and from it you will get practical experience that will be worth more to you than all the essays written on the subject. Think seriously of this during the winter. Get all the information on the silo you can and write the AGRICULTURIST any question arising in your mind for which you cannot find a satisfactory answer.

When toppers cross a bridge they close their eyes lest they should see the water.

If You Don't see what you want ask for it.

If you want information on any farm-subject write to the Agriculturist. If we are not in a position to give you the information you seek or answer your question it will be referred to the best authority we can find, failing which we will publish it and seek the answer from among our many subscribers. If you once got in the way of referring to your agricultural journal for information you will be pleased with the result. The men who answer your questions are chosen for the departments over which they preside, for their special knowledge and practical experience. In a word, when you take up your paper "if you don't see what you want, ask for it."

Winter dairying pays best, in most instances, but, to carry it on, the cows should commence to come in about September. To this end, they must be bred during the three winter months. Heifer calves raised from them will be in good form to go on pasture in the spring; and will be old enough to breed, the following winter. In mixed farming, the dairy can be better and easier attended to, in the winter. Too many farmers waste time in the winter, which could be profitably spent, running a dairy. They often eat up the profits of the farm, by a winter of inactivity, and then declare that "farming don't pay." We have not found a business that would, under those conditions unless, it yielded enormous profits.

A RATHER NOVEL method of raising potatoes was tried this year by Wilford Van Wart of Central Hamstead. He laid the seed on a rather damp piece of meadow and covered them about six inches deep with buckwheat straw and in the fall he had, from a piece of land 4 feet wide by 19 feet long, two bushels of fine early rose. If that method proves successful it will facilitate the work very much; at any rate it is worthy of a more extended trial.

THE ST. JOHN AGRICULTURAL society held its monthly meeting on the 27th ult and discussed several matters in connection with their work. It was decided to hold a special meeting on the third Thursday in December in place of the regular meeting.

PONY BREEDING.

Col. Domville Complains That the McKinley Bill Has Shut Him Out of the Business.

Some fifteen years ago Col. Domville of Rothesay, N. B. began breeding ponies for the American market. He met with success until a short time ago, when the McKinley bill compelled him to sell out. The writer called upon the colonel a few days ago, and gathered the following information from him:—

"I started my herd" said he, "with a Shetland pony stallion purchased from Sir Joseph Hickson of Montreal, paying \$150 for the animal at my risk the day he was foaled. A pair of mares obtained from the stables of Senator Cochrane of Quebec, completed my outfit. From those mares I raised thirty nine colts, which were foaled and raised covering a period of nearly fifteen years. The Shetland pony is a very hardy animal, but peculiar in his habits and disposition. You cannot raise them in the same manner as you would horses with any degree of success. I had the basement of a large barn devoted entirely to their use, and in the winter left the doors wide open so as they could run in and out. They have no stalls but bedded together like sheep. During the day, provided it was fine, I had hay thrown out on the snow for them to eat, and always kept some spread on the basement floor for night consumption. My experience has led me to believe that what is known as 'cow hay' is the most suitable food. You must always avoid feeding grain; it not only disagrees with them but actually has a tendency to increase their size, and this is what we must avoid. In the U. S. A. Herd Book, a pony 44 inches high and over is ruled out. C. P. Willard of Chicago, the well known engine builder, is the president of the Pony Association, and is very particular upon this point. There being no necessity of feeding out grain, the cost of raising the little animals is only a trifle. In fact one can easily get a herd through a winter at an outlay of \$2.00 per head. The rules in relation to breeding are peculiar. The stallion is permitted to run with the mares, so as he can use his own discretion as to the proper time for service. The young stallions, 14 months old, have to be separated from the rest of the herd, otherwise there will be trouble. There are no geldings. It has been found that a pony gelding loses his shape and becomes unmarketable. The blacksmith has rarely to be called in, and it is very seldom that a pony wears a shoe. Lame-

ness is almost unknown, but lice play a conspicuous part in the unhappy portion of a pony's life. Carbolic acid is an excellent remedy. It is very seldom you can sell them singly, as a span of ponies is more desirable to have than only one. I found my best market across the line, but the McKinley bill has caused a duty of \$30 per head to be placed upon ponies, which effectually kills the business. Perceiving that there was no longer any money in it I sold out my entire herd to Col. S. D. Bruce, proprietor of the "Field and Farm." Pony breeding is an undeveloped business in this country, and as far as I am aware I was the only person in Canada who possessed at any time what really deserved the name of a herd. If the duties were removed it would not take very much to persuade me to start over again.

The Jersey.

"If the milk of the Jersey, though a small milker, is so rich that when adulterated with an equal amount of water it is still richer than ordinary milk, is she not the most economical cow for a milk dairy?" Every dairyman might well give that question earnest thought. Remember the good Jersey cow of to-day will milk from 16 to 20 quarts a day when fresh and is a great stayer. G. W. Farlee, of Cresskill, N. J., has recently made two tests in comparing Jersey with Holstein-Friesian milk. He set three quarts of pure Holstein milk for cream and at the same time set one and a half quarts of pure Jersey milk, to which he added an equal amount of water, with the result that the adulterated Jersey milk showed one-fifth more cream than the pure Holstein milk. Later he reversed the test by adulterating Holstein milk and setting Jersey milk pure and the result was that the Jersey milk showed three and two-fifths times the quantity of cream given by the adulterated Holstein milk. This looks like a fair test, as Mr. Farlee says the Holstein cow was an excellent specimen of her breed, and the Jersey was an 18 quart cow that had been milking six months and was three months in calf.

An Agricultural Society to the Front.

The members of the Sussex and Studholm Agricultural Society have authorized Capt. H. M. Campbell, of Foxhill Farm, Apohaqui, Kings Co., N. B., to purchase for them \$100 worth of pure bred sheep. The choice of breeds has been left entirely to the captain's discretion. The society could not have placed the matter in better hands.

Heroism Remembered.

[St. John Gazette.]

Hardly less creditable to the people of Quebec and Ontario are their subscriptions for a testimonial to the families of Capt. Lindall and Quartermaster McLaughlin who sacrificed their lives to duty on the steamship Vancouver than has been the response of the people of St. John and the province to Mayor Lockhart's suggestion that by voluntary contributions a memorial should be erected to the late Fred Young. Such outbursts of genuine sympathy with manhood and boyhood in the exercise of their noblest qualities goes far to disarm the cynic who would have us believe that the family of man is wholly selfish and regardless of any heroic act, and that such acts are always prompted by motives less creditable than at first sight they would appear. It is true that there is a foundation for the cynicism of the cynic; the rich rarely part with their surplus possessions till the parting is inevitable; they who would rise to positions of honor or power rarely have much regard for the sufferings of those that it may seem necessary for them to tread under their feet, but the humble oftentimes have a boundless sympathy with the trials of the humble, the poor with the sorrows of the poor. And as it is, to the honor of manhood, that almost everywhere a noble act arouses our admiration however slow we may be in giving it expression. This truth has been brought prominently forward by the Courtenay Bay disaster's sequel, and by the readiness with which the call for a testimonial to the families of Capt. Lindall and Quartermaster McLaughlin has been responded to in Quebec and Ontario. The matter was taken in hand only five or six days ago and already over \$2,000 have been subscribed. It is expected that the sum collected will soon amount to \$5000. By no means is this an utterly selfish and heartless world.

INEXPERIENCED RIDER: "What! you wish me to pay in advance? Are you afraid I shan't come back with the horse?"

Proprietor of Livery-Stables: "Ahem. it is just possible the horse may come back without you."

INAPPROPRIATE SMILE:—Young Merchant: "Mein Fraulein, I adore you! If I had it in my power I would place all the riches of Golconda in your hands!"

Young Lady: "Better not! My hands are not as big as all that."

REGISTER THE MILKERS.**A Proposal to Establish a Milking Herd-Book.**

The British Dairy Farmer's Association, are considering the advisability of establishing a Dairy Herd-Book, in which all cows giving over a certain quantity of milk per year, can be registered, and at a late meeting they passed the following resolution:—

That this meeting heartily approves the establishment of a dairy herd-book, and recommends the Council of the British Dairy Farmers' Association to invite the co-operation of those members who are interested in the various breeds of dairy cattle in forming a representative committee, which shall consider and report on the best means of carrying out the object reliably and satisfactorily on self-supporting principles.

To make a cow eligible for such registration, the owner would be compelled to keep a milk register, a certified copy from which, of a cow's record for at least one year, must be furnished by the owner of the cow. If such a Herd-book could be made self-sustaining, and thorough inspection and tests made of all cows for registration this would not be the least valuable Herd-book. In this country it would be better patronized than any pure bred herd-book, for nearly every farmer is interested in it, whether his cows are pure-bred, grades or scrubs. If it would induce our farmers, to keep a milk register it would prove an invaluable missionary. The cows must give more than sufficient to pay for their keeping, and the surplus yield, is the farmer's profit; and only by keeping a milk and feed register, can this be surely ascertained. If such registers, were commonly kept, dairy farming would pay better, because farmers would not keep cows in their herds, that did not yield them a profit. To accommodate such a herd-book to all milking cattle, it would be necessary to have the milk tested, for butter fats and solids. Our agricultural societies and dairy associations should move in this matter.

Warmed Water vs Feed Drinks.

There seems to be considerable difference of opinion among dairymen and doctors on the wisdom of warming the water for stock in winter. If you keep your cattle in a warm stable, it would seem a good idea to take the chill off the water they are given in very cold and blasty weather, when they do not get much exercise. It would certainly be better if cows were never given water colder than 50 or 46 degrees. Cows drink a good deal of water at a time, and that it should be ice cold sometimes cannot be for their benefit. The dairyman, who

does not raise his stock but simply buys milch cows to sell them, when they have dropped off in their milking to a point that does not pay, will surely use warmed water for his cows in winter, as thereby he increases the flow of milk. While agricultural scientists are discussing and experimenting with warmed and chilled water for cows, breeders had better await the results of their tests. Few of them have as yet pronounced positively in favor of warming the water for stock, but the majority of those heard from, speak favorably of it. It is urged by some that it is unnatural that arguing cattle in their wild state did not have the water warmed for them. But there is nothing in such a contention. Our domestic animals are cultivated stock, and should no more be treated as wild animals than cultivated strawberries should be treated, or rather neglected, like their little wild brethren. It is right to study the nature and habits of our domestic animals, but they are kept for profit by most people, and as such, should be housed, fed and watered on business principles to yield the most profit. If the people of the Island of Jersey had treated their cows like wild animals instead of cultivating them as they did the "wonderful little butter machine"—the Jersey cow—would not have been developed. Again, the longer a growing calf is fed on warmed drinks after weaning, the faster and larger it will grow, and they usually develop into better animals by being so fed until they have passed over their first winter. Then, in what sense is it natural that they should be fed iced drinks the following winter? Where did the fallacy spring from that suggests that the cow in her "natural" or "wild" state berded among fields of snow and ice for five months in the year? Wide-awake dairymen will soon adopt the plan of giving their cows water with the chill taken off in winter, and it will become the rule where it is now the exception; and unless it is shown to be a positive injury to breeding stock, breeders will do the same.

The Cutter and Grinder.

The economy of cutting fodder for horses is well illustrated by the experience of the London Omnibus Co. They fed one lot of horses 16 pounds of ground oats, 7½ pounds of cut hay and a ½ pound of cut straw, and they kept in as good condition and did as much work as another lot fed 19 pounds whole oats and 13 pounds of uncut hay; thus by grinding the grain and cutting the fodder they saved 6 pounds of grain and 5 pounds of hay.

Dishorning.

There is not much of importance to be urged against removing the horns from dairy cattle. It is not a painful operation, when compared with ringing the bull, castration, caponizing and lots of surgical operations, for the purpose of correcting deformities or making domestic animals more useful, to man. It is ridiculous to call it cruelty. If you have a boss cow in the herd, that drives the rest from the water or feed, she is a positive injury to you. She proves a good milker, by comparison, because she drives the others from their water or fodder; or she may be a good milker under any circumstances, so that you do not want to part with her, yet she may injure other cattle, even to the extent of killing them. Take her horns off, and so make her harmless. Calculations have been made to prove that it takes a lot of extra feed to grow and maintain horns on cattle, in which case, we had better cut them off, because, cattle must be kept on business principles to make every cent toll. Don't be afraid to do it if you want to. If you would like to grow a herd of polled cattle, get some caustic potash,—ten cents worth will last you a year—and rub the embryo horn a minute or two, before the calf is a month old, or as soon as you can feel the little horn. If you would rather have polled cattle, dishorn what you have, or, sell them, and buy cows without horns. If you have a breed suitable for all requirements of your business, except their horns, then dishorn.

Destroying Alder Bushes.

In response to an enquiry in last Farmer concerning the extermination of alder bushes, Mr. Charles Maitart, of Lower Bedeque, informs us he has had some experience with this nuisance to the farmer. Some three years ago he desired to get rid of a lot of these bushes and the plan he adopted was to wait until the ground was frozen hard in the early winter when he broke or cut the alders close to the ground. By this means he completely rid his farm of these, and the fact that three years have passed by since that time without the roots showing any signs of growth is sufficient proof that they are dead. The reason of his success, he believes to be the fact that at the time the bushes were cut the sap was then in the roots. The same principle, he says, holds good in regard to the time of pruning fruit trees. If this needful operation is performed during the winter season much harm will be done to the trees, if indeed they are not killed. —Summerside Farmer.

TROTTERS FOR THE FARMER.

How He May Be Raised By a Man of Admitted Means.

There is no need to set out at length the fascination of breeding horses for speed. From the millionaire to the farmer all love the enticing pursuit. Yet nearly every agricultural journal from Maine to California forbids the farmer raising anything but a draft horse. "Leave the trotters and runners to those that can afford them," they say. "You stick to the work-horse, and if you do take up the others, woe unto you!" And then follows a long list of the probable results: gambling, extravagance, laziness, bankruptcy, poverty, Sodom and Gomorrah. Now all this is "important, if true." But it isn't true. Lazy men like to fish, but all fishermen are not lazy. Tramps pedestrianate, but all pedestrians are not tramps; and a good, square man that wants to raise a trotter can do so and remain a good, square man still. I am raising one myself, and I may be somewhat prejudiced. I am not going to attempt to defend those who raise the thoroughbred, or even to palliate their action, but I do defend those who raise trotters, and when I say trotters, I mean the standard-bred horse; those registered or entitled to be registered in the only registry for trotters in America, "Wallace's American Trotting Register." If he who causes two blades of grass to grow where one grew before benefits the world, surely he who raises a horse that will gain a minute in a man's life by conveying him more speedily from one point to another is a philanthropist.

Anyway if a farmer has a standard-bred mare, or even one with a good trotting-action, and prefers to breed her to a standard-bred horse instead of a Percheron or Clydesdale horse, why shouldn't he? Must he always plump along in the old farm-wagon to town and back behind the old plow-horses? Must he always take the dust of every Tom, Dick and Harry on the road? Must his boy when out with his sweetheart, behind sober old "Charley" mentally curse the farm as the fleet stepper of his town-bred rival flashes past him? Must it always be grind, grind, grind with the farmer—his nose to the grindstone eternally—no amusement, no pleasures, such as men of other pursuits have?

The farmer who has a mortgage on his farm, a chattel mortgage on his stock and farm-machinery, and a year's store-bill to pay is not the one whom my plea is for. It is for the farmer whose property is clear, who has plenty of fodder in the barn; who se wife has a Sunday dress, and has a piano or organ in

the parlor, and a hired girl to help her when she is not able to do the work alone. Even if there were no money in it (which I don't admit), such a farmer as the latter ought to raise a trotter for his own pet and for his own pleasure, as one of the just rewards for doing so much for the pleasure or benefit of others. Did the Almighty intend that only draft-horses should be raised? Did He put horses into the world solely for mankind to see how much money could be made out of them? Why does He cause the beautiful flowers to bloom, the song-birds to carol their sweet songs? To the enthusiastic horseman his horse is a beautiful object, that delights the eye more than any flower; his movements are graceful, his speed produces a thrill of pleasure, and no song of bird is more inspiring than the rapid pat, pat of his horse's feet as he flies down the road.

While the raising of a trotter occasionally for the farmer's own use or pleasure is justifiable, continuous and indiscriminate breeding of trotters by the ordinary farmer is going to the other extreme, and ought to be condemned in vigorous and unsparring words. Here comes in the question whether the farmer is able to sell his trotters to advantage. Few farmers are. It requires a knowledge of the trotters anatomy, training and pedigree that few farmers have the time or opportunity to learn.

But in case a farmer desires to raise a fast stepper for his own use or at least to increase the speed of what he has, he must have for a brood-mare one with no constitutional weakness that may be transmitted to her progeny. Second, she must have good trotting-action. The more speed she has the better, but she must have the action. Third, she must have good staying-powers. A trotter whose strength disappears after one or two short bursts of speed is of no earthly use to any one. Fourth—well there are a number of fourths, for that is as far as I will go—there are intelligence, beauty of form, ambition; but above all these I place—more trotting-action. If a farmer has a mare that conforms to these requisites I would advise him to investigate her pedigree, for it is almost a certainty that there will be found valuable blood coming in somewhere. I say valuable blood advisedly; for, while pedigree, alone will not make a trotter, it will often sell a trotter, and it behooves the farmer to increase the value of his property by every possible means. If the mare's sire is an unregistered son of a registered sire it adds

to her value. Ascertain, if possible, every drop of trotting-blood in her veins, no matter how slight, and do not give up your search at the first failure. Stick to it until you exhaust every means of information.

The only standard bred-mare I possess I bought on her good looks and trotting-action only, and paid \$200 for her, her owner, a very intelligent business man, assuring me that she was not standard-bred, being by Pottawatomie Chief, dam by Blind Eagle. Sure enough, the Trotting Register disclosed no such names; but subsequent investigation fully established the fact that Pottawatomie Chief was registered under the name of Monarch Swigert, and Blind Eagle as Grey Eagle. By Rule 7 of the National Association of Trotting-Horse Breeders, established December 14, 1877, my mare is standard-bred. This is the rule: "The female progeny of a standard horse, when out of a mare by a standard horse," shall be accepted as a standard trotting-bred animal.

Then comes the selection of a sire. When one has the world to choose from this is a mighty question, and even with five or six to choose from it is often a puzzler. A sound body, natural trotting-action, a great vitality and ambition are absolutely necessary. Then comes the question of pedigree. He must be registered, and the more trotting and producing-blood in his pedigree the better.

Other things being equal, get as much as you can of the blood of old Rydyk's Hambletonian. There are numerous advocates of the Morgan, the Clay, and the Mambrino, but the figures show that Hambletonian and his sons and daughters have brought forth into the trotting-world far more speed than any other family, if not of all combined. Hambletonian himself sired 41 performers in 2.30 and under; and not only that, but he also sired 107 sons who in their turn are sires of 567 performers. When any one in your hearing claims superiority for the Clays or the Morgans, you can set it down as the result of either ignorance or prejudice, and there is a great deal of prejudice among horse-breeders and trainers. Pay \$2.50 for "Wallace's Year Book for 1888." It will give all the information you need about trotters and their pedigrees, and then no one can deceive you with a false pedigree for their stallion, as is often the case. If the stallion is registered he has a number, and so has his sire and the sire of his dam. Get their numbers and names and look them up yourself.

Choose a fashionable family if possible. There is generally some good reason for their popularity; besides, you want a horse that you can sell if necessity obliges you to part with your pet. At present, the Wilkeses, Electioneers and Nutwoods seem to be the foremost competitors for public favor, with the Pilot Medlums, Kentucky Princes and Robert McGregors close after them. Untried but well-bred colts from any of the leading sires mentioned above are worth from \$500 to \$5000; to be moderate in my estimate, and will average probably \$1000, and the service-fee of those leading sires will be from \$100 to \$500. Unless your mare is of fashionable breeding do not pay more than from \$25 to \$50 for service-fee. Rather take some promising son or grandson of one of these great sires, some young horse who has a reputation to make. Remember these colts are going to the front some day, when the old fellows who have made their reputation have died off. \$25 or \$30 is enough to pay, and young horses, first class in every way, can be had for that sum. Go 50 miles, if you have to, in order to secure the services of the right horse, rather than take up with one you know is not what he ought to be. It is better to breed to a draft-horse than to do that.

If you have a long-legged, long-bodied mare do not breed to a horse of the same kind, or you will only make the matter worse. If she is short-legged and chunky, choose a horse whose legs and body are of fair length at least. If she lacks spirit, select a sire, if you can, of more than ordinary vitality and vim. In other words, use your best judgment to procure a union of elements that "nick" well.

Breed to have your mare foal in the spring after the cold weather has gone. The foal is delicate and easily chilled, and beside that, the grass will soften up the mare and cause a plentiful milk-flow. After all your trouble, expense and patience you must not run any chance of losing that colt.

Here is what a writer in a recent number of the Horseman says: "I have known men of refinement, intelligence and marked business ability, men who have earned and love their ease, to get up morning after morning at daylight to see what a new-born foal is like; and frequently the ladies of the house are not far behind. I have seen just such a man nurse a sick colt or brood-mare as he would a loved child. I have had men who would not speak of an investment of thousands leave their business to show the stock, and with glistening eyes

point out a favorite foal, and remark that they believed that was nearly the best colt in the country, and it did not seem to me at all foolish or boastful.

The great curse of the American people is their lack of recreation. Their unceasing devotion to money-getting without proper rest of mind and body makes them practically old men at middle age. They get into one rut and remain there, and their whole life is one grind. Let them breed a few horses. Let them get out into the beautiful sunshine and renew their youth." All of which we fully and heartily indorse.—Fank H. Valleite, in Northwestern Agriculturist.

THE MCKINLEY BILL.

Agricultural Tariff Changes.

Under this new law, the duties on agricultural products which compete with the products of American farmers have been largely increased. The following summary shows the chief changes in the agricultural schedule:—

Horses and mules from 20 per cent. to 30 dol., per head up to 150 dol. in value; 30 per cent. ad valorem over 150 dol.

Cattle from 20 per cent. to 10 dol. per head.

Hogs from 20 per cent. to \$1.50 per head
Sheep from 20 per cent. to \$1.50 per head.

Barley from 10 cents to 30 cents per bushel.

Barley malt from 20 cents to 45 cents per bushel.

Barley, pearl, from 1 cent per pound to 2 cents per pound.

Buckwheat from 10 per cent ad valorem to 15 cents per bushel.

Corn from 10 cents to 15 cents per bushel.

Cornmeal from 10 cents to 20 cents per bushel.

Macaroni, &c., from free list to 2 cents per pound.

Oats from 10 cents to 15 cents per bushel.

Oatmeal from 1 cent to 1 cent per pound.

Wheat from 20 cents to 25 cents per bushel.

Wheat flour from 20 per cent. to 25 per cent. ad valorem.

Butter from 4 cents to 8 cents per pound.

Cheese from 4 cents to 6 cents per pound.

Milk from 10 per cent. ad valorem up to 5 cents per gallon.

Milk, sugar of, from free list to 8 cents per pound.

Broom-corn from free list to 8 dol. per ton.

Eggs from free list to 5 cents per dozen.

Hay from 2 dol. to 4 dol. per ton.

Hops from 8 cents to 15 cents per pound.

Plants, trees, shrubs, from free list to 20 per cent.

Flax seed from 20 cents to 30 cents per bushel.

Vegetables, prepared, from 30 per cent. to 45 per cent.

Vegetables in natural state from 10 per cent. to 25 per cent.

Straw from free list to 30 per cent. ad valorem.

Teazles from free list to 30 per cent. ad valorem.

Apples from free list to 25 cents per bushel; plums and prunes from 1 cent to 2 cents per pound.

Raisins from 2 cents to 2½ cents per pound.

Bacon and hams from 2 cents to 5 cents per pound.

Beef, mutton, &c., from 1 cent up to 2 cents per pound.

Kentucky Horses:

A few counties in Kentucky receive every year a good many hundred thousand dollars simply because the breeders of that section resolved, some years ago to produce the best of a certain class of horses, which they deemed most suitable to their surroundings, says an exchange. The constant and general effort of the breeders of that section in this direction has had the desired result, and Kentucky horsemen have, by the excellence of their product, established a reputation that is of priceless value to them, and no doubt their horses bring higher prices than animals of equal merit bred elsewhere. There are many districts that have just as good facilities for raising high-class horses of some kind as Kentucky has for producing trotters, and the same chance of getting a similar reputation. And if a country once gets such a reputation it will be a source of wealth as long as horses are in demand, and buyers, knowing they can get what they want there, will be plenty, with competition brisk in consequence. In time of depression, too, breeders in that section will be the last and least affected, and the first to recover. An organization devoted to the kind of horses the natural conditions render most profitable, should be formed in every country which produces a surplus of horses, to push forward and better the stock and secure a reputation that will be of permanent value to the producers.—Horse & Stable.

The November Crop Bulletin.

The crop bulletin for November bears date the 10th ult. The secretary says:—

We are approaching the end of what has been in some respects the most unfavorable season for agriculture experienced in this province in recent years. New Brunswick is not, however, alone in this experience, which has been general throughout North America, with the exception, perhaps, of Manitoba and the Northwest. A wet spring was followed by a dry spell, this again by wet and by dry weather. As one correspondent graphically puts it: "It was hard to get crops into the ground and harder to get them into the barn." The whole crop falls considerably below the average both in quantity and quality, so far indeed that the enhanced money value, resulting from scarcity, will not restore the balance. It is commonly said when the crop is short, that the increased price will give the farmer as much money as he would have received from a larger crop at lower prices: but this year the surplus for sale, of prime quality, is so small, comparatively speaking, that the outlook for the winter is not favorable.

In Albert Co. there is a shortage in hay and oats: in Westmorland Co thousand of tons of marsh hay were lost, and the exportable surplus is considerably smaller than usual. The oat crop is also short in Westmorland and the importation will have to be large. In Kent Co there is a shortage of hay and grain, but the potato crop is above the average. In Northumberland oats are short but other crops are good. The crops of all kinds in Restigouche are very satisfactory. In Kings the exportable surplus of oats, hay and potatoes is less than usual and Queens is deficient in oats and hay and potatoes to some extent. York is short in grain; Carleton has less oats and potatoes than usual; Victoria and Madawaska will have little produce to export, and in grain Charlotte Co. is short.

This department has never had to chronicle a failure in the wheat crop, and the yield per acre is always satisfactory. There would seem to be no good reason why its cultivation should not increase, although from the lack of proper milling facilities, which the smallness of the demand in any locality will prevent being supplied, it is not to be expected that domestic wheat flour will ever supplant to any very much greater extent, than at present, that brought from the West. It may be interesting to note that, of the total amount of wheat consumed in the Province, about one third is raised here.

Barley did much better than oats this year, the average yield for the Province being about 80 per cent of a full crop, with quality 80 per cent of prime. The cultivation of barely is strongly recommended.

Potatoes are estimated to have yielded 77.4 of a full crop on a larger acreage than usual. The quality is put at 82.2 per cent of prime. Much rot is reported, which will reduce what would otherwise have been a very considerable surplus for export.

Turnips are returned as yielding 80 per cent of a full crop with quality at 84. The fall weather was not favorable for development of this root. A better record is shown by carrots, which gave a yield of 87 per cent with quality at 86 per cent.

Our Trade in Agricultural Produce.

We have from the department of agriculture a report of the trade in agricultural produce between Canada and the United States during the year which ended on the 30th of June last. The totals are, exports \$16,501,447; imports \$5,842,272, in which horses, cattle, sheep and swine imported or exported for improvement of stock are not included, nor are the exports of swine for other purposes, the value of which it is presumed, was inconsiderable. It is natural that the United States whose boundaries touch our own should be large consumers of our agricultural products, for in proportion to their population they have a smaller number of farmers than ourselves, and notwithstanding the heavy duty imposed on many of our farm products they can be laid down in all of the eastern and many of the middle states at less than their cost when brought from the great agricultural districts of the west. Our largest importations were of corn, pork and flour; 2,804,838 bushels of the first, valued at \$1,206,910; 15,205,972 pounds of the second, valued at \$992,423; and 257,391 barrels of the third valued at \$993,227. In addition to the above we had bacon and hams, \$335,159; lard \$635,859; cornmeal \$368,495; and fruits, dried, green and canned, \$456,431. Of all these products, with the exception of the last, no inconsiderable portion has gone to make up the supplies of our lumbermen. Canada should not be so dependent on the United States for its corn, cornmeal and wheat flour, and as the great Northwest is rapidly coming under the dominion of the plough it is likely that the importation of those articles will rapidly decline, and our farmers in the east as well as in the west should see to it that our markets are better supplied with native meats. If they would keep their farms in a state of productiveness, continually increasing in value and in the bulk of their crops, they must keep stock to consume their hay, grain and roots instead of selling

them to the impoverishment of their lands. The keeping of cows that are good for butter and cheese, sheep that are good for mutton or in fleece, draught horses of approved breeds, swine that fatten quickly, yields the farmer an abundant return and keeps his farm in excellent condition, while by selling the products they would consume, he impoverishes his farm, and rarely saves enough to compensate for its deterioration.

Our largest exports, the sum of which was \$16,501,447, were:—

Barley.....	11,265,881 bushels.....	value \$7,721,475
Eggs.....	15,379,081 dozens.....	2,345,715
Horses.....	18,021.....	1,987,558
Sheep.....	297,041.....	1,188,829
Hay.....	105,220 tons.....	1,081,802
Dried, green and canned fruits.....	"	617,022

Of the latter it will be observed that our exports were \$70,501 in excess of our imports. From the above it will be seen that during the year the United States took from us in agricultural products about \$3 for every man, woman and child in the dominion, while we took from them about 10 cents for every member of their population.

The average exports of agricultural produce from Canada and the United States to Great Britain during the years 1887, 1888 and 1889 was as follows:

ARTICLES.	IMPORTED FROM	
	CANADA.	UNITED STATES
Horses.....	No. 246.....	236
Cattle.....	59,290.....	184,230
Sheep.....	47,481.....	6,464
Mutton.....	lbs. 2,274.....	200,300
Pork.....	61,035.....	17,219,768
Bacon and hams.....	7,481,615.....	324,411,035
Beef, salted.....	15,889.....	25,234,428
" fresh.....	637,122.....	32,039,982
Meats, canned.....	401,083.....	107,244
all other.....	105,271.....	105,271,659
Lard.....	58,609.....	85,077,011
Tallow and stearine.....	2,740,634.....	5,094,018
Butter.....	81,539,460.....	74,187,456
Poultry.....	1,501.....	12,413
Eggs.....	doz. 1,229.....	186
Wheat.....	bush. 2,291,851.....	42,417,917
Barley.....	" 6,147.....	967,170
Oats.....	" 602,464.....	17,877
Peas.....	" 2,227,585.....	32,156
Flour.....	bls. 218,209.....	6,991,302
Potatoes.....	bush. 1,767.....	724
Onions.....	".....	4,087
Apples.....	" 944,305.....	2,541,168
Flax Seed.....	" 325.....	
Flax dressed and undressed.....	".....	
Wool.....	lbs. 1,441.....	60

* Value only. † Berries included.

A CHEERFUL GIVER.—Caller: "Beg pardon for intruding, but knowing your reputation for benevolence, I have taken the liberty of stopping to ask you to subscribe to the fund to buy a bell for our church. We hope to collect enough to purchase one of the largest and handsomest bells now manufactured."

Benevolent Individual: "Where is your church located?"

Caller: "Corner of Restful Avenue and Peace Street."

Benevolent Individual: "I will subscribe gladly. A man I hate lives near there."

Sea Weed.

Considering the use which is being made of sea weed as a manure abroad, it is extraordinary that more attention is not being paid in New Brunswick to that valuable fertilizer by farmers residing near the sea. The cutting and use of sea weed in France, is not left to the discretion of the inhabitants, for since the year 1681, it has been regulated by a royal ordinance, and the use of sea weed has been limited in such a way as to favorize agriculture. The harvesting of these marine plants is now fixed by the administration of France between the months of March and April, that is to say, after their reproductive powers are exhausted. Those which are washed ashore by the action of the waves are rarely employed, since they have lost in the water part of their fertilizing principles.

In the Isle of Re, sea weed constitutes, so to speak, the only manure employed, since there are no cattle on the island; it is chiefly made use of in the vineyards. On the shores of the Channel in the arrondissement of Morlaix from the commune of St. Pol-de-Leon to Plouescat, there is a belt of land 24 kilometres long by 8 kilometres in depth, where market gardening is carried on very successfully, thanks to the abundance of the sea weed which the people of this section have on their shores.

In France sea weed brings about the same price as ordinary manure, its effects being about the same. Its benefit as a fertilizer for beets has been especially well attested in France. As regards the value of sea weed as a fertilizer Storer says, "It is an easy matter for the farmer to keep a large stock of cattle upon the grass which the sea manure nourishes, and so to supplement that kind of manure by the dung of cattle thus kept. But the stable manure though helpful is not essential. "Here in New England," the author says, "there is abundant evidence of the great value of sea manure. If we throw out of consideration the interval farms of the Connecticut river and its tributaries, which are practically farms manured by way of irrigation, and the farms that depend upon the manure from great cities, and perhaps some farms upon Buzzard's Bay, Long Island Sound, and the coast of Maine that are based upon fish manure of one kind or another the only really fertile tracts in New England are to be found back of those sea beaches upon which an abundant supply of sea weed is thrown by storms. The strips of country behind Rye Beach in New

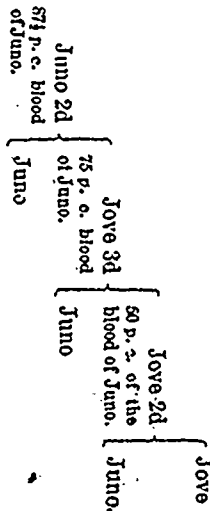
Hampshire, comprising the towns of Rye, Greenland and Northampton affords a striking example of this fact.

"Abundant crops of hay and (in former times more than now) of potatoes, are thus grown and sold year after year, while the country remains fertile and fortunate. It is interesting to see the fields in that region remain green throughout the summer draughts, at times when the scantily manured fields of the interior are brown and parched."

The same article gives from the author's own analysis the following facts relative to the composition of rock weed taken from Hingham harbor: water 77, 49; organic matter 18, 12; ash 3, 04.

In and In-Breeding.

The Western Rural says on this subject: "We lay it down as a scientific fact that there is too much danger in it to do it in a haphazard way." In our opinion, the "haphazard way" is a very stupid way and is no criterion for in and in-breeding. We believe in careful well managed in-breeding. Suppose you have a very excellent female and you wish to reproduce her in her progeny how are you going to do it except by producing an animal having a large percentage of her blood? To do that you will, in the first place, mate her as well as you can with a vigorous male, choosing him on his record, pedigree, and individuality, with a view of intensifying the good qualities of the female and bringing to the breeding any good points wanting in her. If the offspring of this mating is a male, as soon as it is old enough for use bring it back on its dam. If you then get another male, as soon as it is old enough to serve, use it in the same way. Produce a female and the result will be had as follows:



We see here that while the son of Juno and Jove has but 50 per cent of the blood

of his dam, by mating him with his dam you get Jove 3d, with 75 per cent. of her blood, and Jove 3d, mated with his dam, gets Juno 2nd, with 87 1/2 per cent. of old Juno's blood. This should give an animal very much like Juno and better, if good judgment has been used in the first mating with Jove. Such breeding as this depends somewhat on the practicability of controlling the sex. The Stuyvesant theory of controlling sex, as improved upon and practised by Dr. Rankin, of Linesville, Penn., has been proved correct and quite practical in good hands. It requires much care and attention to in-breed successfully and unless you intend to give it that, leave it alone. But the "haphazard way" is as bad in out-crossing as in in-breeding and breeders who go by it are misnamed.

Trade with England.

The London correspondent of the Montreal Star writes to that paper that since the passage of the McKinley bill by the United States Congress, there has been landed in England by the various steamship lines running from Canada one thousand cases, or a total of one million four hundred thousand eggs, and these have met with ready sale at remunerative prices. This correspondent made a tour of business houses, dealing in provisions, and the consensus of opinion among the proprietors was that the Canadian egg trade is now established on so firm a basis that were the McKinley bill repealed to-morrow Canadian eggs would be shipped to and sold in England in as great and greater quantities than at present. It was further added that even were the United States in a position to take all the product of the Canadian hen, the English dealer would certainly ask especially that the English trade be not diminished. There is practically an unlimited demand for this branch of Canadian product and the future expansion of the trade is not so much a question of what the market demands, but of the capability of Canadian produce shippers to supply that demand. The McKinley tariff has proved a blessing in disguise by directing the attention of Canadian shippers to the English markets.

"My dear uncle," says a humorous writer, "was the most polite man in the world. He was making a voyage to the Danube, and the boat sank; my uncle was just on the point of drowning. He got his head above water just once, took off his hat and said, Ladies and gentlemen, will you please excuse me?" and down he went.

THE POTATO DISEASE.

A Summary of the Reports Received by the Board of Agriculture Under the Special Enquiry Into the Position and Prospects of the Potato Crop in Great Britain in 1890.

The Mark Lane Express of Nov. 3rd contains the following:—

The Board of Agriculture has made special enquiry through the Inspectors under the Drainage and Improvement Acts, into the position and prospects of the potato crop in Great Britain, in view of the appearance of potato blight in Ireland. The general purport of the reports received has been summarised in the memorandum:—

The information placed at the disposal of the Board is drawn from the personal observation of twenty-four inspectors in England and seven in Scotland, who have reported on the apprehended extent of disease in the potato crop during the month of September in twenty-eight English and eighteen Scottish counties.

It must be noted that these reports do not profess to offer a general review in statistical form of the yield of the potato crop of 1890, nor do they claim to be exhaustive of the varying conditions of the entire counties referred to by the Inspectors, who must occasionally be understood as supplying only such data as concerned the locality from which the report was dated. After making due allowance, however, for these limitations in the scope of the enquiry, it is believed that an aggregate of very valuable information is available for a sufficient number of typical districts, collected by very competent observers, to represent the condition of the potato crop throughout Great Britain.

It may be useful, before attempting to analyse these statements, to recall the fact that the extent and importance of potato-growing varies very greatly indeed between different parts of the United Kingdom. According to the statistics for the current year, now in process of tabulation, the respective areas devoted to potatoes are as under:—

Divisions.	Area returned as under Potatoes.	Percentage of Arable Land under Potatoes.	Area of Potatoes per 100 of Population.
	Acres.		Acres.
England and Wales ..	389,153	2.57	1.33
Scotland	141,528	3.86	3.43
Ireland	780,891	19.14	16.62

Ireland, where the relative importance of this crop is by far the greatest (one-fifth of the arable surface being employed in potato-growing), lies beyond the jurisdiction of the Board of Agriculture, and is necessarily outside the scope of the present enquiry, which concerns Great

Britain only, where little more than 3 per cent of the arable land is used for potatoes.

Among the English counties, also, the relative importance of the potato crop varies greatly. In the southerly midland, western, and south-western counties the area thus employed is considerably less than in certain counties of the north and east, where the greater prevalence of the crop is to be ascribed to soils specially favourable to the growth of the Ross, and Cromarty, where collectively 16,000 acres are grown, is mentioned.

In this part of Scotland, as in many English districts, neglect to change seed or to attend to rotation, is clearly recognised as weakening the disease-resisting power of the root. In the Orkney Islands disease has been unusually prevalent. Half of the early crop was affected, but not the later and main crop while from Shetland it is reported that no disease at all has yet appeared.

Further west, in the large potato-growing county of Lancaster, a total damage of some 20 per cent. is spoken of in the early sorts, the crops on wet, cold, strong clay suffering most. There has, however, been no spread of disease here since September began. In Cheshire the blight is not regarded as serious, although a third of the early sorts have been diseased, the most highly-manured land being said to suffer most, and the "moss" land scarcely at all. Samples of the late crops, on being tested, show only 2½ per cent. of disease. In Stafford and in Derby, as also in Cumberland, only the early and garden sorts appear to have suffered badly, from 50 to 75 per cent. of these crops being diseased.

The northern Scotch inspectors send a more unfavourable report than those already considered. A very serious and general presence of disease in Inverness, were badly affected. Change of sort and change of soil are urged as disease-resisting measures. In North Devon some poor crops are noted with 25 per cent. of disease, crops in the east and south of the county being a full average, with very little disease; while in a limited area in the west, between the Tavy and Tamar, as much as 75 per cent. of disease among the early potatoes, and 33 per cent. on the whole, is reported.

At the opposite extremity of England, a full report from Northumberland—where, however, the area is small (4,500 acres)—notes the appearance of disease on nearly a third of the farms, but only to the extent of 8 to 10 per cent. where present. Early and garden sorts have here also suffered most,

The appearance of disease from August 10th to 24th was connected with thick, muggy weather, followed by heavy rain, and the spread of the blight was checked when sunshine returned. Similar meteorological conditions are noted as attending the outbreak in North Yorkshire, where some ten per cent. of damage is mentioned, the early sorts suffering of the same sorts. The potato crops of Hants and Berks are mentioned as almost free from disease, but less in bulk.

Notts, with 7,000 acres, and Warwick with 5,000 acres, are the largest potato-growing counties in the midland group, and their little actual disease is reported, although its presence among the earlier kinds of potatoes in gardens is noted. Leicester reports speak of the early crops as "tinged with disease," but the later as free and promising a full crop. Mention of as much as 25 per cent. of disease comes from one inspector in Oxford.

The reports from the western group of counties between Salop and Wilts inclusive concur in pronouncing little occasion for alarm. The main crops seem sound, and 5 to 10 per cent. only of harm is suggested, although here again exceptionally early sorts have suffered more or less, some of the garden crops being diseased up to 50 per cent. Change of seed and soil are among the precautions here also suggested.

In the south-west of England, Somerset, with an area of 7,000 acres, reports but a small proportion of the later sorts diseased, although the earlier sorts on plots; where frequent planting with the same crop is regarded as the responsible cause. Among the predisposing causes of much attacks of disease in season's favourable to its development, stress is laid on the want of change in the varieties of potatoes grown, and the use of the smallest tubers for seed.

From Lincoln, with its large area of potato land, the reports received indicate the general soundness of the crop in the south-east of the county, and the presence of not more than 17 per cent. of disease in the west. In Norfolk an average yield, with some failures in the early crop, but not much disease in the latter, is reported.

Reports from the five south-eastern counties speak also of but a slight appearance of disease. In Kent, where 14,000 acres are grown, an injury of not more than 10 per cent. is indicated, cold clay soils showing most disease, and some of the earlier varieties of potatoes most affected. Among the

predisposing causes, other than the wet summer, noted by the Kentish inspector, is the loss of vitality from continuous potato and special facilities for marketing. Thus, in the east, Lincolnshire alone reports this year an area of nearly 43,000 acres, while a group of contiguous counties in the north-west, viz., Lancashire with 37,000 acres, Cheshire with 24,000 acres, and the West Riding of York with 22,000 acres, swell the relative total of that region.

Dealing with the information supplied in the order in which counties are grouped for the agricultural produce statistics, it appears that reports have been received from three inspectors relating to districts in Cambridge, Huntingdon, and Suffolk, and furnishing information respecting the East Anglian potato crop. All three report but a slight presence of disease varying from 15 per cent. to under 10 per cent. In some parishes, it is said, there has never been less disease; and the damage seems largely restricted, as one reporter clearly shows, to cottage gardens, allotments, and potting up to 50 per cent. The inspector who writes for the West Riding, a country with 22,000 acres of potatoes, speaks of "but little or no signs, and only rumours of disease."

In Aberdeenshire, Banff, and Elgin all early varieties seem to have been much affected. In the potato-growing county of Perth, where little short of 15,000 acres is grown, the inspector believes potatoes on the lowlands to be more diseased than on the higher-lying lands, where the crop is under average, but of good quality. In Fifé, where a similiar, or indeed slightly greater area is grown, a fair average crop is noted, the later sorts being nearly free from disease, although as much as 50 per cent. damage has been done to some early varieties, which, it is contended, are always more or less subject to disease.

South of the Forth the county areas under potatoes are smaller. One general report from the three Lothians, where the crop covers over 13,000 acres, the county of Edinburgh states the early crop as under average, and showing 25 to 50 per cent. of disease, but the late or the main crop little effected. The border counties of Roxburgh and Berwick show little disease observable except in early garden crops,

In the south-west, Ayrshire, where 8,000 acres are grown, reports an early crop deficient by a third; a late crop 50 per cent. below the average, and one-third diseased. In Lanarkshire, on the contrary, the inspector's verdict indicates a fair average for the later crop. The

reporter in Kirkcudbright notes a full early crop, already lifted, as free from disease, "a half-early crop" suffering to the extent of 50 per cent., and a late crop only 20 per cent. below par.

As to crops most affected, there is a very general concurrence of opinion on the part of the Scotch inspectors as to the "Regents" being among the varieties showing the most disease. The varieties reported by the Scotch inspectors to be most free from disease generally are the Champion and the Magnum Bonum. Other varieties, however such as the Bruce, Fortyfold, Dons, Sutton's Rocks, Kidney, and Maincrop are also placed in this category in certain reports.

In England the varieties pronounced, most generally free, or disease-resisting, were the same as in Scotland, the Magnum Bonum being most frequently and the Champion repeatedly mentioned. A longer list of other varieties appearing free from disease in certain localities includes the following:—Maincrop, Early Rose, Abundance, Sutton's New Ashleaf, Victoria, Early Puritan, Patterson's Victoria, Early White Beauty, Rocks, Snowdrop, Daniels, Imperator, Adirondacks, Bruce, Myatt's Prolific.

In view of the general concurrence of reports respecting the exceptional presence of disease only among the earlier varieties of the potato, it may be pointed out that this may be not improbably ascribed to the period when the wet weather, to which the development of the disease was largely due, prevailed in the past summer. When the subject of potato disease was examined by a Select Committee of the House of Commons in 1880, it was reported that among the essential conditions for the full development and rapid spread of the disease was the coincidence of moist weather with a particular stage of the growth of the plant.

The general result of the present enquiry appears to be that no serious loss of the potato crop in Great Britain from disease is to be apprehended, as the late or main crop is regarded as comparatively sound.

A GANDER UNDER POLICE SUPERVISION.

—A family residing in the little town of Cumbinnen possessed a gander which was particularly obnoxious to the neighbors, as it hissed at and even bit the women and children who came into the yard. Complaints were made to the police, and a constable was detailed to watch the animal and report its conduct from time to time. After a while the manners of the culprit showed a marked improvement, and the watch was withdrawn.

The Silo.

The St. John County Agricultural Society are seeking information about ensilage, and we are glad to see they have made a decided step in that direction. At their November meeting they appointed Dr. Steeves to prepare a paper on the subject, to be read at their next meeting. This is a move in the right direction. We think the subject is in good hands.

It is for the best interest of our farmers and dairymen, that the best methods of ensiling their crops should be as well understood by them as haymaking. It is noticeable that the silo grows in favor and stays wherever it is introduced, and those farmers who have adopted it do not give it up.

PEAS AND OATS.

Oats grow well in our provinces and so do field peas. They grow well together and make a capital crop for the silo. The impression that corn is the only crop that can be successfully ensiled, and that it cannot be grown to mature sufficiently for ensilage in this climate, deters many of our farmers from adopting the silo. They are correct to the extent that there are localities in these provinces where the larger varieties of corn will not mature to make the best ensilage; and it is in such locations that peas and oats may be grown and ensilage made, which is far superior to corn for feeding.

SHEEP ON THE SILO.

Many of our farmers think that as we cannot compete with South America and Australia in the production of wool that sheep are not profitable stock to raise in the maritime provinces. But they are wrong. Sheep will pay well here, but the large breeds for mutton and lamb would seem to be the kind of stock to raise. To raise them successfully roots, or some succulent fodder is needed in winter. The silo meets this want perfectly and in this matter alone is a great boon to the sheep grower in these latitudes. Ensilage can be grown and stored more cheaply than roots or hay and in practical use better results can be obtained with less expense feeding ensilage than with hay or roots. With ensilage for the bulk of your fodder you can make up a better and cheaper ration.

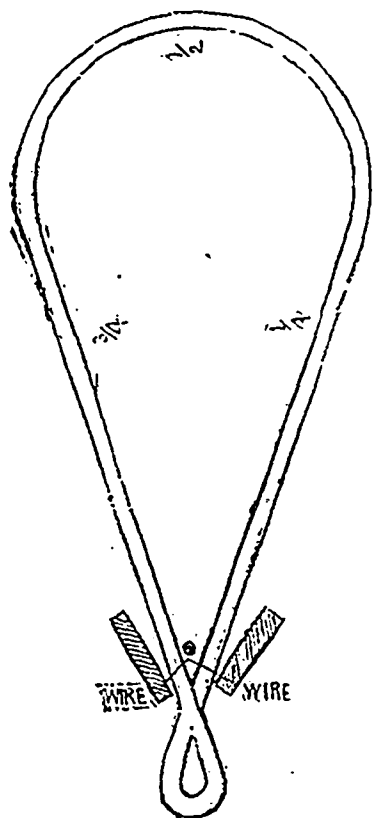
AN ATHLETE'S TRAINING.—Byseps: "I hear Howell, that you have joined an athletic club. That seems odd for a man who would not go four hundred yards without taking a cab."

Howell: "Deah boy, that's why I hope to distinguish myself. Just think I've been saving my stwenth!"

THE KITE-SHAPED TRACK.

It is Expected to Revolutionize the World of Horse Racing.—The Records Have Got to Come Down.

Horse racing has reached such vast proportions that the trotting courses and paraphernalia of a racing stable to the most minute detail are made as nearly perfect as possible, and all that human skill and money can produce are brought into play. To the breeder of today, a 2.30 trotter is of little consequence, and he therefore strives in order to prove his theory to produce not only the 2.20 and 2.15, but the 2.10 and 2.08 performer. Since the day that the queen of the turf, Maud S., made her famous mile of 2.08½, the nearest approach to a record-breaker was been the California-bred filly Sunol.



THE KITE-SHAPED TRACK.

Woodburn will be on trial on the new styled track, which is in the shape of a parabola, or as it is commonly called, the kite-shaped track, which has furnished such universal astonishment in the turf world.

The idea of a track with two turns, which would also have a straightaway finish, such as the Morris park and Mommouth running courses, was first suggested by William B. Fasig, the secretary of the Cleveland Driving Park Association, and an illustration of it is

herewith given. Mr. Fasig's idea was to have a track exactly a mile long with straightaway stretches one-third mile in length, and a one-third mile turn, with a loop at the small end of the track for scoring and finishes.

It was not until this year that a public test of the kite-shaped track was made. It remained for that progressive young horseman, C. W. Williams, of Independence, Ia., to first introduce it to the public, and with nearly half of the \$105,000 received for the stallion Axtel, he built one of the finest race tracks in the West, and at the summer meeting not long ago he and the track created a decided sensation in trotting circles. On this track the trotters and pacers were able to make from two to five seconds better time than they ever accomplished on the regulation course, and each day brought out a phenomenal record-breaking mile. Among them, Cricket, by Steinway, the pacing wonder from California, took a 5-year-old record of 2.10. Roy Wilkes reduced the pacing stallion record from 2.12½ to 2.09, and a day later to 2.08½; Major Wonder paced in 2.14½ in a race and Manager, a mere baby, by Nutwood, reduced the two-year-old pacing record to 2.16½. Among the trotters, Margaret S. trotted the best three consecutive heats on record for a four-year-old, and then reduced her record to 2.12½, which is, next to that of Sunol, the best on record for her age; Jack trotted in 2.13 and repeated in 2.12½, and Alabaster by Aberdeen, trotted the third heat of a race in 2.15, which is the best on record for a four-year-old stallion in a race. All these wonderful performances created suspicion and led many to believe that the track was short, but a meeting on the kite-shaped track at Kankakee, Ill., settled all doubts as to the new styled course being the fastest in the world. The Kankakee track is of much finer soil than Mr. William's and is considered a trifle faster. The track in the stretch is 80 feet wide, and on the turn 65 feet wide, nine horses being allowed to start abreast. The track is on a level from start to finish, and in the stretch has a pitch of three-fourths of an inch in width, thus forming a four-foot start to the track on the stretch, and making it easy for a horse to travel. The first performance of note at Kankakee was, perhaps, the most important of the year, considering that the stallion Nelson reduced the world's stallion record to 2.11½, which was immediately followed by the performances of Greenlander, by Princeps, who trotted in 2.15½; Nutmeg, by Nutwood, in 2.19; Faustina, a two-year-old stallion in 2.23½ and a mile in

the third heat of a race in 2.19½, by the Montana pacer. B. B., whose history and ancestry are unknown.

There are many strong arguments in favor of the kite-shaped track. It is admitted that on a track with only two turns and with straightaway stretches, a horse is enabled to cover a mile in faster time than on a circular track, in that with but two turns every horse in a race, with the exception of the one at the pole, would trot a shorter mile, and be able to reach the wire in quicker time.

The kite-shaped track is always the safest from collisions, as accidents are almost entirely confined to the first turn. The word is given to a long stretch of straightaway, and there is no incentive on the part of the driver to rush for the pole, so as to have an advantage on the first turn obtained on the circular track, and with a third of a mile of straight track all horses in a race have an equal show with the pole horse, which does away with all unnecessary and tedious scoring.

The question of whether or not the kite-shaped track will succeed the circular course is at present the leading topic of conversation among the prominent breeders of America, and the outcome will be watched with great interest.

Dr. A. B. Cunningham, of Annapolis, has sold to W. S. Jewett, of St. John, N. B., the handsome and highly bred two year old filly, Kitty, Wilkes, sired by Judge Folges, 5.516, by young Wilkes 2.28½ son of George Wilkes 2.22, dam by J. R. Resse 2.351, by Walkill chief 2.30, son of Hambletonian 10. She is standard bred and called very promising. Dr. C. sold a 3 year old last spring for a long price being by a son of Geo. Wilkes and out of a daughter of Mambrino Boy. She is bred in the purple and on top in the fashion. Axtel 2.12 and Allerton 2.13½ both being bred the same. She is now placed in a sale catalogue in the United States, priced \$1,500, showing that we are improving in high class breeding in the province. This is right, and we are glad that Kitty Wilkes, the last sale, has not gone to the States, this being another choice standard animal retained and added to New Brunswick.—Halifax Echo.

HIS SAD EXPERIENCE.—"No, I denounce flirting from the bottom of my heart," asserted the married-looking man. "I think it very often calculated to lead to results that a lifetime is too short to repent of."

"You are unusually energetic, what's the reason?"

"Well, it was through a flirtation that I got acquainted with my wife."

A Gold Medal Farm.

The Ontario agricultural and art association, sometime since, offered prizes for the best kept farms in the province, that might be entered for competition, consisting of gold, silver and bronze medals. The judges have completed their inspection, and the highest prize has been awarded to C. J. Brodie, whose farm consists of 94 acres of arable land and 6 acres of hardwood bush, in the parish of Whitechurch. After describing the fences which are "straight rail" and wire, the inspectors give an exhaustive description of the fields and buildings. The soil was a stony, clay loam, well underdrained. Not a stick or stone was to be seen in any of the roads, fields or fence corners. The fields were wholly free from thistles and all noxious weeds. The barn was 100-54 feet, set on a stone wall 12 feet high, the basement of which was divided into stables, the whole being admirably planned for the storage of hay, roots and grain, the threshing of the latter and the feeding of stock. The stables for horses were block paved and those for cattle were floored with Portland cement. Mr. Brodie, says the report of the judges, makes stock raising and fattening a leading feature. His shorthorn herd of twelve head were in splendid shape. About 30 head of store cattle are bought late in the fall and fattened during the winter. Mr. Brodie regards this as a better-paying plan than raising the calves on the farm. Mr. Brodie's imported Clydes include a stallion, two mares, a filly and two colts. Little is done with sheep and pigs, and no store cattle are kept during the summer months. In feeding young cattle the object aimed at is to keep them steadily and rapidly growing. Mr. Brodie's farm, on which this stock is kept, and which, practically, is a 94 acre farm, with the exception of one of five acres, and one of 24 acres of hay, is divided into 12 acre lots for roots, pasture and the different grains. Manure is applied at the rate of about fifteen tons an acre in the fall for the root crops. Ploughing and harrowing follow the harvest, and as soon as dry in the spring the ground is again thoroughly tilled. For roots the drills are 27 inches apart. For corn the spring cultivation is very shallow; the rows are three feet apart and the seeds not closer than one in every six inches. For grain the land is surface-worked in the spring. Barley and wheat are sown at the rate of 1½ to 1¾ bushels an acre, and grass seed, equal parts of timothy and clover by measure, at the rate of 12 pounds per acre. For peas the sod is not ploughed until spring,

the seed being sown at the rate of 2 bushels an acre. After the peas are harvested the ground is well cultivated; surface cultivation follows in the spring and oats are sown at the rate of 1½ to 2 bushels an acre. Mr. Brodie has no occasion to expend money for artificial fertilizers. By feeding the produce of his land on his land, its fertility is constantly enhanced. Nothing which will promote the growth of a blade of grass is permitted to go to waste. All the straw passes through the stables. The solid and liquid manures are together wheeled out, and the cattle, horse, sheep and pig manures well intermixed, and the cattle are allowed to trample it solid to prevent exposure to the air. On an average 500 loads of first-class manure are made yearly. About 100 loads are taken away and applied in the early spring; the balance is left till fall, when it is used in preparing the land for the root crops. We have no farms like this Whitechurch farm in the Maritime provinces and no farmers like Mr. Brodie. Many years ago this Mr. Brodie's system was adopted by Mr. Oscar Davidson, in a small way, who on a five acre field at Barrington, N. S., cut annually about 20 tons of first class timothy hay and clover for many years; had Mr. Davidson given his attention to farming exclusively, we have no doubt but that he could have shown a record hardly less honorable than Mr. Brodie's, for it must be remembered that the soil of Barrington, except where it has been carefully cultivated, is not much unlike that about Windsor Junction. We think our agricultural societies might do much to promote good farming by offering medals or diplomas, or both, for the best kept and most productive farms, circumstances of soil, etc, etc, always considered, and charging a small fee to each competitor to cover the cost of inspection and other expenses.

STOCK NOTES.

We cordially invite all Stock men and Horsemen to use these columns. Drop us a card when a calf or colt is dropped or when a sale is made and we will be pleased to publish it. No charge is made.

Mr. Geo. Carvill, of St. John announces that his yearly filly "La Grippe," by Speculator, has been harnessed and driven on the road. She stands 15 hands, and gives promise of great speed. Her owner has entered her in the two-year-old race which is to be opened in Frederickton next autumn.

It is reported that the pacer Roy Wilkes, record 2:08½, the best for a pacer, is lame.

Sheltered Water Troughs.

It is worth while to have your watering trough sheltered by a shed, so, that on stormy days this winter, the cows can drink all they require, shielded from the searching blast. You will find, also, that you can save yourself labor, shoveling snow and cutting ice. It is not the most pleasant job on the farm, when the thermometer marks 10, to 20 deg., and a strong wind is drifting the snow about you. In such weather the cattle coming out of the stable, will not stand long enough to drink all the water they want. And yet they need the water and suffer for the want of it. The milking cows show the loss at the pail. The other stock do not give any immediate sign of loss, but they are just as surely injured. We have seen cows, in warm, nicely ventilated stables, drop off in their milking in cold weather, simply from lack of shelter at the watering trough. They would not stay long enough at the trough to drink sufficient water, and as a consequence would not consume their full ration of fodder. A thirsty animal will not feed well. If you can bring the water into the barn for your cattle, without too much cost do so. It will pay you in more ways than you now imagine.

POULTRY NOTES.

As to the food for hens, it is summed up in the word variety. Give them some grain, the scraps from the table, soft food occasionally, the cabbage leaves and celery tops chopped up, lime in some shape, and plenty of fresh water. In fine weather let them run out about the barns, for besides the exercise of such a run, they pick up lots of food you can scarcely include in your feeding. Do not neglect to give them a little salt occasionally, if you feed soft food. Say, a teaspoonful for twenty fowls.

During the winter, in these latitudes, fowls are necessarily confined to a very limited space. As a consequence, they are infested with lice. To remedy this evil put lots of fine earth in the house. Not gravel, but earth that will become fine as dust, when the hens scratch and wallow in it. So do not neglect to have a few inches of dry earth in your hen house, and in return you will have healthy hens and plenty of eggs, if you feed them properly.

Gentleness and firmness, are as necessary with horned stock, as with horses. It takes that quality in a man to make even a good milker. Don't be noisy among the cows, and under no circumstances, strike them.

Butter.

The reason such fine butter is the rule in Denmark, instead of the exception as it is with us, is that greater attention is given to the industry. The little kingdom is dotted all over with butter factories which employ expert teachers and consulting dairymen to keep up the quality of the product. In New Brunswick real fine butter is a rarity, but what is still rarer are dairies from which a fine uniform grade of butter comes throughout the year. One great reason of this, and probably the principal one, is that very few of our dairymen or dairywomen really know how to make good butter. They work entirely by the "rule of thumb," a rule that will work well enough if all the conditions happen just right. Until our buttermakers recognize the necessity for systematic scientific knowledge in their work, fine butter of uniform grade will remain scarce in our markets. The Danes are justly proud of their reputation for making good butter, and we wish we could say the same for Blue-noses. Reforms are usually slow, for it is difficult to get the average farmer out of his rut. The *AGRICULTURIST* will do what it can to hasten a reform in the methods of butter making among our farmers.

A movement is on foot, corresponding with the needlework of England and Ireland, to advance the farming and dairy interests for the benefit of women. Little girls are being trained to raise poultry, make cheese and butter and brand them with the badge of excellence. The agricultural, industrial and scientific worlds are leered upon for improved machinery and appliances. Not only are the cattle fed in Danish fashion, but by the use of special methods 10 per cent. more butter is extracted from a gallon of milk than ever before. These fancy products are put in the highest markets, and yield a revenue not to be approached by the old system of women's work.

Keep your stables clean, and you will find it easy to keep the stock clean. Don't think of bringing sweet milk, from dirty, bad smelling stables. Get a hay-cutter, and cut your straw for stable bedding. It will keep the cows cleaner, and make the litter go further. Besides, the manure will be in better shape for spreading on the land.

Prices in England, 1788 were, upon an average—Meat, 5d. per lb.; bread, 4d. or 5d. a quarter loaf; eggs in spring, 16 or 18 for 4d.; fowls in summer and autumn, 1s. 6d. a pair; loaf sugar, 7d. per lb. Washing always done at home, and everything ironed, as mangles then cost £25

Always Travels Under the Seat.

Three brother officers were travelling from Umritsir to Lahore, where they had been playing polo during the afternoon. One of them, tired after the game, fell asleep on one of the seats. His railway ticket, which was sticking a little out of his pocket, was promptly annexed by one of the others and transferred to his own pocket. When nearing Lahore his brother officers awoke the sleeping ing youth, saying—

"Now then, old man! Get up! Here we are!"

It was still broad daylight, and for some reason or other the train was pulled up some little way outside the station.

"All tickets ready, please!" shouted the ticket collector.

Two of our friends promptly found theirs, ready for the ticket collector when he should make his appearance. The third searched this pocket, that pocket, here, there, everywhere, but could find no ticket.

"Good gracious! where is my ticket?" he said; "I know I had one right enough when I started; you fellows saw me get it, didn't you?" he asked.

"Yes, you had it right enough," they said; "where on earth can you have put it?"

"I don't know, blessed if I do," he replied, in desperation.

"You'll have to pay the fare," said the others consolingly; "it's not much."

"But I haven't a cent with me," he returned; "will you fellows lend me some dubs?"

Both said they were as high and dry as he was in regard to money.

"Tickets please!" said the collector at last, quite close to the carriage.

"What the dickens shall I do?" said the ticketless one.

"Oh! get under the seat," said the others; "quick! quick, man! here he comes!"

Under the seat like a shot went the man without a ticket! When the ticket collector came to the door three tickets were handed up.

"You have given me three tickets, sir" he said; "but I see only two gentlemen; where is the third?"

"Oh! he's under the seat," they said, with the greatest nonchalance, as if it were an ordinary every-day affair.

"Under the seat!" echoed the ticket collector in a tone of surprise; "what is he doing there?"

"Oh! he always travels under the seat," they said; "he prefers it!"

Whereupon the poor fellow crawled out from under the seat, in a terrible state of heat, and covered with dust and dirt, looking rather ashamed of himself.

CHEESE.**Canada Leading the World.**

During the past few years the increase in the production of cheese in the Dominion of Canada has been something marvelous. The Canadian cheese producers have taken a point from their American cousins, and built up a demand in the European market for their product. Having kept up their standard, they have gained a first-class reputation for their cheese products in the foreign market, which they are zealously guarding.—*Am. Dairyman.*

The Department of Agriculture at Ottawa has received advices from Scotland that Canadian cheese has carried off first prize, beating all competitions.

Are Agricultural Colleges in Luck?

"It is said that the agricultural bill passed by Congress Aug. 30, appropriating \$15,000 the first year, \$16,000 the second year, and an additional \$1,000 each year thereafter to State agricultural schools, has been so construed by the Comptroller of the Treasury that all these institutions will this year receive \$31,000 each. The increasing appropriation continues, till the annual appropriation reaches \$25,000, at which amount it remains stationary. Experiment stations will also continue to receive \$15,000 each year from the Government."—*Breeders Gazette.*

Warmth and Ventilation.

Make your stables warm and ventilate them. Animals require less fodder to sustain life in comfortable quarters and can apply a larger proportion of their rations to the production of milk or beef. It costs more to winter stock in a cold stable because it takes more fodder to keep them. Ventilation is necessary to the health of the stock, but it should be in the ceiling or roof, not through crevices between the boarding. Make your stables comfortable for this winter and you will never be willing to winter stock in cold stables again.

A whirlwind carried up the haycocks at Maidenhead, and deposited them on the other side of the Thames.

**REASONABLE EXCELLENT
RATES. TABLE.**

**LAMY'S HOTEL,
Amherst, N. S.**

W. B. GANONG, - Proprietor.

First Class Stables.

Centrally Situated.



INTERCOLONIAL RAILWAY

1890. WINTER ARRANGEMENT. 1890.

ON and after **MONDAY, 24th November, 1890**, the trains of this Railway will run daily (Sunday excepted) as follows:—

TRAINS W. L. LEAVE ST. JOHN

Day Express for H. f. s. and Campbellton....	7.10
Accommodation for Point du Chene.....	10.40
Fast Express for Halifax.....	13.30
Express for Sussex.....	16.30
Fast Express for Quebec and Montreal... ..	16.55

A parlor car runs each way on express trains: leaving St. John at 7.10 o'clock, and Halifax at 7.15 o'clock. Passengers from St. John for Quebec and Montreal, leave St. John at 16.55 o'clock and take sleeping cars at Moncton.

The train leaving St. John for Quebec and Montreal on Saturday at 16.55 o'clock will run to destination, arriving at Montreal at 18.05 Sunday evening.

TRAINS WILL ARRIVE AT ST. JOHN.

Express from Sussex.....	18.30
Fast Express from Montreal and Quebec (Monday excepted).....	9.35
Accommodation from Point du Chene.....	12.55
Day Express from Halifax.....	19.20
Fast Express from Halifax.....	22.30

The trains of the Intercolonial Railway to and from Montreal are lighted by electricity and heated by steam from the locomotive.

All trains are run by Eastern Standard Time.

D. POTTINGER,
Chief Superintendent.

RAILWAY OFFICE,
Moncton, N. B., 20th Nov, 1890.

BUCTOUCHE & MONCTON RY

On and after **THURSDAY, JUNE 12**, trains will run as follows:

Leave Buctouche...7.15 | Leave Moncton...15.30
Arrive Moncton...9.15 | Arrive Buctouche...17.30

C. F. HANINGTON,
Manager.

Moncton, June 10, 1890.

Human Hair Goods.

J. W. RAMSDELL,

Manufacturer, Wholesale and
Retail Dealer.

Human Hair Goods of Every
Description Kept on Hand.

Gentlemen's Wigs a Specialty

I challenge competition with other
goods made in this or any other country.

AMERICAN HAIR STORE,
38 Charlotte Street,

Up one flight. ST. JOHN, N. B.

**LOOK READ
HERE! THIS!**



THE CLYDESDALES

**EGERTON STOCK FARM,
Stellarton, N. S.,**

are for sale and a rare opportunity will be afforded those desirous of procuring either Stallions or Mares of this popular breed. We will offer young Stallions and Fillies—direct descendants of Darnley—the most famous of Clydesdale sires.

JAMIE THE LAIRD, (3704), (600),

has stood at the head of our studs for five years, and we propose selling a number of his got, all of which will be offered at reasonable rates. These colts are of the most royal breeding, and good animals individually. By dropping us a card, we will mail a catalogue of the stock now offered for sale by us.

Remember that we also breed Shorthorns, Holsteins, Shopshires, and Cheviots.

J. B. McKAY.

SWANN & WELLDON,

Lite with H. C. MARTIN & CO

ARTISTS

—AND—

PHOTOGRAPHERS.

**STUDIO: - 23 Carleton St.,
Saint John, N. B.**

PORTRAITS IN

India Ink, Water Colors, Crayon or Oil
Porcelain and Ivory, copied from any
style of small picture.

**IMPROVED
EXCELSIOR
INCUBATOR**

Simple, Perfect and Self-Regulating.
Hundreds in successful operation. Guar-
anteed to hatch a larger percentage of
fertile eggs at less cost than any other
hatcher. Send 6c. for Illus. Catalogue.

GEORGE H. STAHL, Quincy, Ill.

**SECURE A POLICY IN THE
North American Assurance Co.**

UNSURPASSED FOR

Family Protection or Investment of
Savings—Non-Forfeitable.

Hon. Alex. McKensie, M. P., President;
Wm. McCabe, L. L., B. F. J. A., Eng., Man. Dir.;
Rev. A. H. Layers, Sackville, N. B., General Agt.

**CANADIAN
PACIFIC RY.**

ALL RAIL LINE TO BOSTON & O.

"The Short Line" to Montreal & C.

ARRANGEMENT OF TRAINS: in effect
Oct. 12th, 1890. Leaves St. John Station—
Eastern Standard Time.

6.30 a. m.—Flying Yankee for Bangor, Portland,
Boston, &c., Fredericton, St. Stephen, St.
Andrews, Houlton, Woodstock and points
North. Parlor Buffet Car St. John to Boston.

7.35 a. m.—Mixed for Bangor, Portland, Boston,
&c.; Fredericton, St. Stephen, Houlton and
Woodstock.

4.40 p. m.—Express for Fredericton and inter-
mediate points

8.45 p. m.—Daily Express for Bangor, Portland,
Boston, and points west; daily, except Sunday
for St. Stephen, Houlton, Woodstock, Presque
Isle &c.

Pullman Sleeping Car St. John to Bangor.

10.45 p. m.—Except Saturday, Fast Express, "via
Short Line," for Montreal, Ottawa, Toronto
and the west.

Canadian Pacific Sleeping Car for Montreal.

RETURNING TO ST. JOHN

FROM BANGOR, 5.45 a. m., Parlor Car attach-
ed: 7.30 p. m., Daily Sleeping Car attached.

MONTRÉAL, "via Short Line," 7.45 p. m.:
daily, except Saturday.
Canadian Pacific Sleeping Car attached.

VANCEBORO * 1.10, 10.25 a.m. and 12.45 p.m.

WOODSTOCK 6.00, 11.40 a. m., 8.30 p. m.:

HOULTON 6.10, 11.35, a. m., 8.30 p. m.:

ST. STEPHEN 7.45, 10.15 a. m., 9.50 p. m.:

ST. ANDREWS 6.55 a. m.

FREDERICTON 6.20, 10.30, a. m., 3.15 p. m.

**ARRIVE AT ST. JOHN * 5.40, 9.05 a. m., 1.20
7.05, p. m.**

LEAVE CARLETON:

8.00 a. m., 3.00 p. m.—For Fairville.

* Trains run Daily. † Daily, except Saturday.

For Tickets, Sleeping Car Berths, Time Tables
and all information apply at the **CITY TICKET
OFFICE, CROSS'S CORNER,** or at the station.

FIRE INSURANCE. OLDEST SCOTTISH OFFICE.
CALEDONIAN INSURANCE COMPANY.

Incorporated by Royal Charter and Act of Parliament,

FOUNDED 1805.

AUTHORISED CAPITAL, - - - \$5,000,000.
CLAIMS PAID, EXCEED - - - \$10,000,000.

STEVENS & THOMPSONS,	- - - - -	Agents at St. Stephen.
C. E. DUFFY,	- - - - -	Agent at Fredericton.
R. A. CHAPMAN,	- - - - -	Agent at Moncton.
A. C. HARTLEY,	- - - - -	Agent at Woodstock.
H. J. A. GODARD,	- - - - -	
Sub-Agent.		
COWIE & EDWARDS,		
General Agents for New Brunswick,		
90 Prince Wm. street, St. John, N. B.		

FOR SALE.

Building Property

—AND—

Wilderness Lands

SITUATED IN THE

County of Westmorland, N. B.

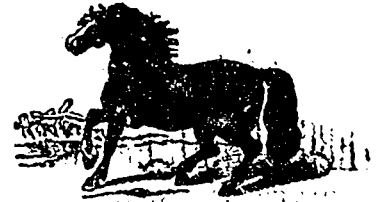
Lot of Wilderness Land, known as the "Intervale" containing 250 acres more or less, and situated about ten miles from Moncton near the Buctouche and Moncton Railway. A large stream and the Main Road intersect it at different points. Also contains excellent grazing land and valuable timber.

Lot of Wilderness Land known as the "Kouchibouguac Lot" containing 250 acres more or less, situated near Dickie's Mills and about five miles from Shediac.

Lot of Wilderness Land known as the "Abougaggin Lot" containing 200 acres more or less, situated about fifteen miles from Shediac on the Main Road leading to Cape Tormentine.

Two Building Lots, situated on the beach below Shediac numbers 17 and 18 respectively.

For particulars apply to G. C. & C. J. COSTER, Barristers, St. John, N. B.



FRANK H. BLACK,
HOMESTEAD STOCK FARM,

Amherst, N. S.

IMPORTER AND BREEDER OF

PURE PERCHERON
HORSES.

A Choice Collection of Stallions, Mares and Colts constantly on hand, imported and homebred, of the highest individual merit and unexcelled breeding.

I have selected my own horses, with due regard to size, quality and breeding, from the best and most reliable breeders in France, and will guarantee every animal sold.

Intending purchasers will do well to inspect these horses and satisfy themselves that this is the place to buy.

I am also offering four or five Percheron Colts which can be had at reasonable prices.

For Sale Below Cost Price,

—A STOCK OF—

Metallic Shingles,

—MADE OF—

Galvanized Iron and Painted Tin.
THE BEST ROOFING MATERIAL IN THE WORLD.

Attractive in appearance. Simple in construction and Application. Easily and rapidly put on. Absolutely storm Wind and Fire Proof.

No Solder required only a hammer and a pair of snips.

Used all over Canada and the United States.

Apply for particulars and catalogue to

ROBT. JARVIS GILBERT

St. John, N. B.

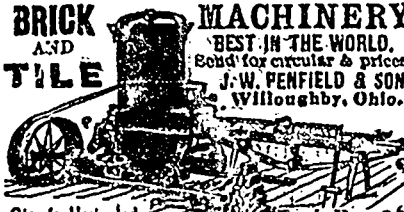
H. C. MARTIN & CO.,

PORTRAIT ARTISTS,

Studio: 52 King Street, - St. John, N. B.

Portraits in India Ink, Water Colors, Crayon, Oil, Etc., copied from any style of small picture. Satisfaction Guaranteed.

BRICK AND TILE **MACHINERY**
BEST IN THE WORLD.
 Sent for circular & prices.
J. W. PENFIELD & SON,
 Willoughby, Ohio.



Stands Unrivaled. Lock Box 26.

**NORTH BRITISH AND
 Mercantile Assurance Company**

CAPITAL, - \$10,000,000

AGENCIES:

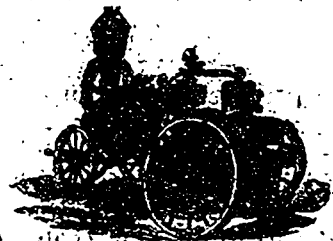
S. Corroll, Carleton; T. E. Arnold, Sussex; R. W. Howson, Moncton; E. Leo Street, Newcastle; J. McKnight, Douglaston; G. B. Fraser, Chatham; W. P. Bishop, St. D.; Bathurst; H. A. Johnson, Dalhousie; Thos Kerr, Campbellton; George W. Hobson, Swan Creek, Sunbury Co.; W. B. Morris, St. Andrews; J. M. Stephen, St. Stephen; G. H. Smith, Deer Island; C. Richardson, Richibucto.

**MANCHESTER
 FIRE ASSURANCE COMPANY
 OF ENGLAND.**

CAPITAL, - \$5,000,000

**D. R. JACK,
 GENERAL AGENT,
 St. John, N. B.**

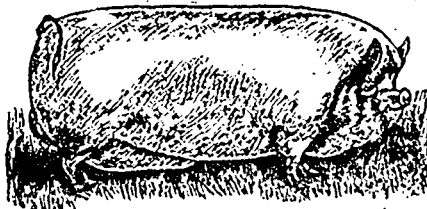
**THE MONARCH BOILER
 (PATENTED) AND HERCULES ENGINE.**



Portable from 6 to 70 horse power. Surpass portable steam power heretofore produced for strength, durability, compactness, and the ease with which they can be moved.
 The 70 horse power can be taken over the roughest roads, or into the forest, and set up as easily and quickly as an ordinary 20 horse power portable engine, and as firm as a brick-set stationary engine. Engines and boilers of every size and description. Rotary Saw Mills, Shingle and Lath machines, Law Grinders, Planers, etc. Mill machinery and supplies of every description. Every boiler insured against explosion by the Boiler Insurance & Inspection Co. of Canada. Write for circulars.
A. ROBB & SONS, Amherst Foundry and Amherst, N.S., Machine works.
 ESTABLISHED OVER 40 YEARS.

**CECIL FRENCH,
 ICHTHAM COURT FARM,
 TRURO, N. S.**

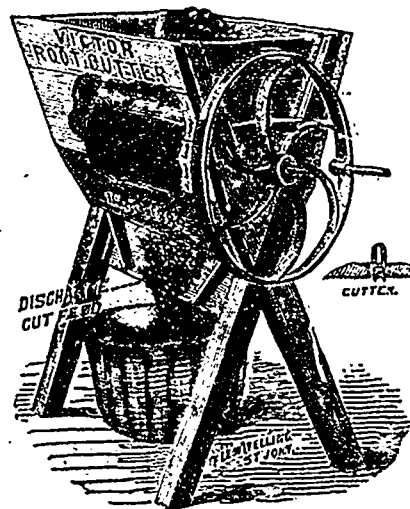
—IMPORTERS AND BREEDERS OF—



Improved Large White Yorkshire wina.

We were the first importers of this breed into New Brunswick and Nova Scotia. All our breeding stock is registered and imported, and especially selected from the herds of N. J. Hine, F. Walker Jones, and George Charnock, England. Stock for sale at all times. Orders now booked for young registered pigs.

ALSO BLACK CHINESE LANGSHANS (Pure Croad Strain.)



**THE "VICTOR"
 Root Cutter,**

(Patented Nov. 12, 1889.)

The attention of Farmers and Stock Raisers is directed to this improved Root Cutter. It is the

Simplest, Cheapest and Easiest Working Cutter

yet, and leaves the roots in better shape for feeding than any other. Send for circular and testimonials of practical Farmers who have used them.

**F. H. FAIRWEATHER,
 PATENTEE AND MANUFACTURER,
 Hampton, Kings Co., N. B.**

**FOSTER & ALLEN,
 Amherst, Nova Scotia.
 Manufacturers and Builders.**

WALNUT, CHERRY, OAK, ASH, BEECH, BIRCH, PINE AND WHITEWOOD HOUSE FINISH,	DOORS SASHES, BLINDS, MANTLES, DESKS, TABLES, MOULDINGS, TURNINGS, &c., &c.
--	---

CHURCH, OFFICE, SCHOOL, BANK and HOUSE FURNITURE.
 —MANUFACTURERS OF AND DEALERS IN—
BUILDING MATERIALS OF ALL KINDS.



THE MANUFACTURERS' LIFE AND ACCIDENT INSURANCE CO

Rt. Hon. Sir. John A. Macdonald, - President.

Absolute Security, Failure Impossible. Large Government Reserves.

All plans of insurance issued to all classes. The only Life Company in the Dominion that guarantees to its Policy holders NINETY PER CENT OF ITS PROFITS, and a vote for each thousand dollars insurance. Policy holders secured in all their rights and privileges by a Special Act of the Dominion Parliament.

Reader. It is appointed unto man to die. Insure in the "MANUFACTURERS." Insure now. If there is not an agent for the "Manufacturers" in your district, cut this out and send to me for particulars. Terms are easy and reasonable. Do not delay. Remember that "all flesh is grass," "the grass withereth, the flower fadeeth." Now in the day of your strength is your opportunity. To-morrow may rob you of the privilege. Insure now and also provide for old age.

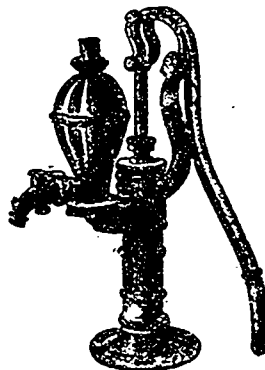
Address—"Manufacturers'" Box 374, Halifax, N. S.

or, J. B. PATON, Manager.



Best Scotch Make, Black, Galvanized and Enamelled

IRON PIPE FITTINGS OF EVERY DESCRIPTION.



PUMPS OF ALL KINDS,

Including Lift, Force, Well and Fire Pumps.

If you are thinking of putting a Pump in your House, or conducting Water over your Farm, send us a rough sketch showing distances and ground level, and we will tell you the kind of Pump to use and what it will cost to fit up.

We cut and bend pipe to sketch at moderate rates. SEND FOR CATALOGUE.

T. McAVITY & SONS,
SAINT JOHN, N. B.

MEDAL BRAND

DURABLE WINDPROOF WATERPROOF

PREPARED ROOFING

2 AND 3 PLY

EASILY APPLIED - SUITABLE FOR ROOFS OF ALL DESCRIPTIONS - A ROOFING FAVORED BY INSURANCE COMPANIES - PRICES LOW - SEND FOR SAMPLE

T. McAVITY & SONS, SAINT JOHN, N. B.

GARDENIA.

The following are extracts from Two Letters.

"Your letter of — received, I will take the car of oil you offer; "Send at once two Bbls. Gardenia. I have never used such nice oil before, and as long as I can buy it you can count on me as a customer; you can also depend upon it, I prefer to patronize a business whose success and profit is not dependent upon another's ruin. This is not in my catechism."

The above speak for themselves and should be a sufficient guarantee of the superior quality of Gardenia. During the past seven years I have improved the quality of the oil imported into the provinces at least fifty per cent., and being a thoroughly practical man and following my business from A to Z. I will continue to improve the quality of the oils imported. I have held the confidence of my trade almost to a man, and I refer to them for the superior quality of my oils and for the treatment they receive. I keep in stock all kinds of Oils, American and Canadian, Animal, Vegetable and Mineral, for which I respectfully solicit orders, which will be filled at lowest prices consistent with the quality of the goods I sell.

J. D. SHATFORD,

St. John, N. B.

J. W. MANCHESTER,

M. O. C. V. S.

VETERINARY SURGEON.

Fee by mail \$1.00. Calls promptly attended to. OFFICE: No. 131 Union Street, St. John, N. B.



CUTHBERT MAIN,
ENGINEER and MACHINIST.

Mill, Agricultural and General Machine Repairing a Specialty.

Opposite Freight Station, Amherst, N. S.

KILGOUR SHIVES,

Manufacturer and Dealer in all kinds of Spruce, Pine and Hardwood Lumber. Cedar Shingles a Specialty.

Campbellton, Restigouche Co, N. B. Prices furnished upon application.