

Agriculture.

THE ROLLER.

Of all the implements in use upon a farm, we consider that there is none, with the exception perhaps of a plough, more absolutely necessary to a thorough working of the soil than the roller. Indeed, we pin our faith so strongly to the roller, that we consider a farm might as well be without harrows as without the roller. Until we actually looked about us and made many direct enquiries we could not have believed that at least 50 per cent of our farmers, have not, nor did they ever possess a roller; while on the other hand we can find none who once possessing this implement will ever be without it. Of course, in neither of these categories do we include that class who don't buy one, although knowing its advantages as they can always find some kind, but to our mind foolish, neighbour who will "lend the loan of his'n."

The late seeding time of the past season was peculiarly dry, and we observe more barley sown upon lumpy land than usual. The grand secret of success in barley raising is thorough cultivation. The seed bed should be, if possible, as mellow as an onion patch, while fine tilth is an absolute essential to a sure catch of clover seed. When land is dry and breaks up lumpy we may harrow for a week without much effect, the harrow teeth jump from the lumps and slide past them, but the roller will crumble such lumps to dust. We have this year taken particular notice of the length of time taken by barley to come up, and have invariably found that it will be from 2 to 5 days later upon land that is lumpy than upon a mellow bed. In dry weather we use the roller as much as the harrows, invariably rolling immediately after the plough, and before dragging. A soil whose surface is finely mellowed will retain moisture much longer than a rough field. Therefore on our lighter lands roll your Spring crops when they are a few inches high; thus retaining moisture and compact the earth firmly about the roots. When a man plant a cabbage he always presses the soil tightly around its roots. Cereals require the same treatment, and this may be accomplished by the use of the roller. We believe that the time is not far distant when the iron rollers, "The Cambridge and "The Crosskill," so much used in the old country, will be adopted here. In the mean time let us assure our readers, that a roller at 25 dollars, compared by the good work performed is of equally as much value as harrows at 20 dollars.—Canada Farmer.

WHEAT GROWING.—There are two ways of cultivating this crop; with no manuring except what was applied when the corn was planted—ploughing the ground in the spring as shallow as possible, and sowing from the first to the middle of May. The other method, I am sorry to say, is not practiced by much the larger number of farmers, and differs in this; The wheat ground is that where corn was planted the previous year, and, instead of ploughing in the spring, the ground is ploughed in the fall, and a good coat of manure is applied at the time of ploughing. So that the ground is already to sow as the snow leaves the ground in the spring. And on this early sowing depends the success of the wheat crop.—Maine Farmer.

GRASS SEED IN FALL.—Many of our farmers are going to be short of hay, and perhaps find that have been not seeded down enough this spring. Grass (timothy) may be sown in fall. Work the land very fine and mellow towards the end of August. Spread finely composted manure; sow about 6 quarts timothy per acre; cover in with brush harrow; on light land roll; in the spring, early, sow 4 quarts clover and you will have a meadow to cut next summer. But remember the land must be clean and in good heart, and the finely comminuted manure ought to be used.

The Agricultural Society of France offers a prize of 2,000 francs and medal for the best memoir "On the theory and practice of Irrigation." The papers are to be sent to the Secretary before the end of this year.

Rye flour boiled in water with a little alum added while boiling, makes an adhesive paste almost as strong as glue.

Scientific.

ARTESIAN WELLS.

Any one who engages in deep borings for water does so at considerable risk, as no geologist or chemist can give him positive assurances of success. In this country we have numerous artesian wells, some of them of great depth. The famous St. Louis well is about 1,900 feet deep, and the force with which the water rises is very great. It is, however, entirely unsuited to domestic uses, being charged with mineral constituents derived from rocks and minerals over and through which it passes in its course. Offensive gases are often mingled with water coming from deep wells, and the temperature is uniformly high. The gases present are usually carburetted hydrogen, and sometimes sulphuretted hydrogen is evolved freely, giving to the water the smell of stale eggs. The temperature of the water depends in a great measure upon the depth of the boring. The well at St. Louis delivers water at a temperature above 100° F., and the water of most other wells is found above 70° F. In winter such water, if pure, would be delightful for washing purposes, but for drinking it would be vapid and nauseous. It is also without atmospheric air, and would need not only to be cooled but to be aerated to fit it for table use. Altogether we may conclude that the deep springs are not very promising sources from which to obtain potable waters.

It has been remarked that the water from artesian wells is derived from great distances. This was shown in a boring at Tours, France, from which, when the borer was withdrawn, quantities of sand and small snail-shells were ejected, which without doubt found their way there from the mountains of Anvorgne, thirty miles distant. Eels and small fish have been found in the water of artesian wells, which shows that there is sometimes direct communication through the strata with distant ponds or superficial accumulations of water. The water which falls upon inland mountains and hills and passes downwards through previous strata often finds vent in the sea, and thus the curious spectacle is afforded of a fresh water spring bubbling up through a mass of salt water. Humboldt mentions such a spring as occurring at the mouth of the Rio Sargatos, off Cape Caloche, four hundred yards from the land. The inhabitants of Syracuse obtain excellent fresh water by rowing off in boats into the salt sea, and dipping it up into vessels as it rises to the surface from the orifice below. It is difficult to conceive of anything more paradoxical than this.—Fireside Science.

NEW MODE OF WASHING.—The ill effects of soda on linen has given rise to a new method of washing, which has been extensively adopted in Germany and introduced into Belgium. The operation consists in dissolving two pounds of soap in about three gallons of water as hot as the hand can bear, and adding to this one tablespoonful of turpentine and three of liquid ammonia, the mixture must then be stirred, and the linen steeped in it for two or three hours, taking care to cover up the vessel containing them as near hermetically as possible. The clothes are afterwards washed out and rinsed in the usual way. The soap and water may be reheated, and used a second time, but in that case half of a tablespoonful of turpentine and a tablespoonful of ammonia must be added.—The process is said to cause a great economy of time, labor, and fuel. The linen scarcely suffers at all, as there is little necessity for rubbing, and its cleanliness and color are perfect. The ammonia and turpentine, although their detergent action is great, have no injurious effect upon the linen; and while the former evaporates immediately, the smell of the latter is said to disappear entirely during the drying of the clothes.—Western Rural.

An admirable discovery has just been made in the shape of a new green, which is brilliant enough to replace the poisonous color produced by arsenic, it is composed of twenty parts of oxide of zinc and of sulphate of cobalt, mixed into a paste with water, and exposed to a red heat.

A Box containing a black bear was received at an express office in San Francisco the other day; outside; "Black Bear—If you don't want to get bit, kepe your fingers out of the crag."

HALIFAX, N. S., AUGUST 7, 1872.

MESSENGER ALMANACK.

AUGUST, 1872.

Table with columns: Day, SUN. Rise, Sets, MOON. Rise, Sets, High Tide, Low Tide. Rows for days of the month.

THE TIDES.—The column of the Moon's Path shows the time of high water at Parrsboro', Cornwalls, Horton, Hantsport, Windsor, Newport, and Truro.

High water at Pictou and Cape Tormentine, 2 hours and 11 minutes later than at Halifax. At Annapolis, St. John, N. B., and Portland Maine, 3 hours and 25 minutes later, and at St. John's, Newfoundland, 20 minutes earlier, than at Halifax. At Charlottetown, 2 hours 56 minutes later. At Westport, 2 hours 54 minutes later. At Yarmouth, 2 hours 20 minutes later.

FOR THE LENGTH OF THE DAY.—Add 12 hours to the time of the sun's setting, and from the sum subtract the time of rising.

FOR THE LENGTH OF THE NIGHT.—Subtract the time of the sun's setting from 12 hours, and to the remainder add the time of rising next morning.

GATES' LIFE OF MAN BITTERS, FROM THE

Roots and Plants of Nova Scotia, formerly manufactured by Mrs. Gates, of Wilmet. Who was pronounced incurable of Liver Complaint and Dropsy by many skillful physicians, when procuring several receipts from an eminent French physician, she was entirely cured; and afterwards cured hundreds of cases for which at first there seemed to be no hope.

In cases of lung disease, the No. 1 Bitters must be taken with No. 1 Syrup, except in weak cases and young children, when No. 2 Syrup and No. 1 Bitters must be used. Those suffering from Lung diseases, should not fail to use in addition to the above, Gates' Vegetable Plaster applied between the shoulders and to the throat and chest with Nerve Ointment.

In Liver complaint and Dyspepsia, No. 2 Bitters must be taken with No. 1 Syrup. In bad cases of Dropsy, No. 2 and No. 3, Bitters must be taken with No. 1 Syrup.

For Gravel No. 5 Bitters and No. 1 Syrup, together with Gates' Vegetable Plaster and Nerve Ointment applied to the back near the kidneys.

For pains and Rheumatism in any part of the body, No. 1 Syrup, and Gates' Nerve Ointment and Acedian Liniment mixed together applied to the painful parts.

For sore throat, rub the Liniment and Ointment (mixed together) into the parts affected, at the same time taking No. 1 Syrup to cleanse the stomach.

These medicines will be promptly forwarded by the manufacturers when orders are accompanied by the cash. Address CALEB GATES & CO., Middleton, Wilmet, Annapolis Co.

This is to certify that in May last I was sorely troubled with what the Doctor pronounced Pleurisy and other complaints. After applying to several eminent physicians and obtaining no relief, I was by the advice of friends, who had used Gates' medicines, induced to make a trial of the same. After using two bottles of it I am happy to say that I consider myself entirely free from the diseases which the doctors pronounced incurable and safely recommend it to all those suffering with same complaint.

MISS ABBY COHORN. The above sworn to before me at once Liverpool Queens Co., this 16th day of Oct. 1871. T. N. SELDON, J. P.

This is to certify that I was taken early last spring with severe colic, soreness in the chest and lungs, entirely unable to do work of any kind. The Doctor pronounced me far gone in consumption and considered incurable. Hearing so much of Gates' Bitters and Syrup, I got two bottles, followed directions and can truly say that I consider myself entirely cured.

MRS. A. GARDNER. Sworn to before me this 10th day of Oct., 1871. T. N. SELDON, J. P.

FEEL. Bitters \$1 per quart; Syrup 50 cents per pint bottle; Liniment 30 cents per bottle and the ointment 20 cents per box. Address CALEB GATES & CO., Farmington, Wilmet, Annapolis Co.

A large number of certificates, similar to the above, have been received and will be published at times for the information of the afflicted and the people generally.

AGENTS.—George V. Rand, Wolfville. John Webb, Windsor. J. E. Newcomb, Hantsport. J. L. Cogwell, Kentville. Sheffield & Wickwire, Canning. GENERAL AGENT, JOHN K. BENT 124 Granville Street, Halifax. July 11.

GOVERNMENT SAVINGS' BANKS.

Public Notice is hereby given that under authority of Act 34 Vic. Chap. 6 of the Dominion Parliament, Government Savings' Bank Branches will be opened on the 1st July, 1872, at the undermentioned places in the Province of Nova Scotia, and in charge of the following Agents:

Table with columns: Agents, Towns, Counties. Lists various locations and their corresponding agents.

Deposits will be received in sums of one dollar and multiples of a dollar up to any amount, and repaid on demand, with interest at the rate of four per cent. per annum, from date of deposit to date of withdrawal.

Government has, however, recently established an issue of Dominion Stock, bearing 5 per cent interest, to which monies remaining on deposit in any Savings Bank for at least one month, may be transferred in sums of \$100, but on the whole not to exceed \$1000 for any one depositor.

The Stock is not transferable, but will be redeemed on three months' notice from depositor; otherwise the interest will be paid half yearly, on the 30th April, and 31st October.

The Offices will, until further notice, be open daily from 10 a.m. to 3 o'clock, p.m. Further information may be obtained on application to the Agents.

By order of the Minister of Finance, THOMAS D. TIMS, Financial Inspector.

June 12. CAUTION!! CAUTION!!!

TO THE PUBLIC OF THE BRITISH PROVINCES OF NORTH AMERICA.

I beg most respectfully to acquaint the public of the British North American provinces that in May 1871, I caused the business at 80, Maiden Lane, New York, for the sale of HOLLOWAY'S PILLS AND OINTMENT, which were up to that time prepared by William Brown, now deceased, to be closed. I regret to say that I have reason to know that the management of the late business had for some years, and in many ways, been most corrupt, and it may be that the Pills and Ointment were not prepared with that care I have always desired.

Those who do not wish to be deceived by buying spurious medicines, which are now likely to emanate from the States or elsewhere, but to possess themselves of the genuine HOLLOWAY'S PILLS AND OINTMENT, manufactured by me in London, England, will do well to see that each pot and box bears the British Government stamp on which is engraved the words "HOLLOWAY'S PILLS AND OINTMENT," and that the address on the label is 533, OXFORD STREET, LONDON, where only they are manufactured, and in no other part of the world. The retail prices are on the labels in British currency, and not in dollars and cents.

No representative of mine will ever travel through any part of the British Provinces or the United States, either to sell, or to take orders for my Pills and Ointment, and as I have reason to believe that attempts will very probably be made to deceive the public in this way by persons calling upon medicine vendors, falsely representing that they are acting for me, and with my knowledge and consent, I deem it advisable to put the public on their guard against any such deceptions.

I most earnestly entreat all those who may read this advertisement, that they be pleased, in the public interest, to communicate the purport of the same to their friends that they may not be defrauded of their money by purchasing perhaps worthless imitations of the genuine HOLLOWAY'S PILLS AND OINTMENT.

I would ask, as a great favor, that should it come to the knowledge of any person that spurious medicines are being sold in my name, he be pleased to send me all the particulars he can collect respecting the same, that is to say, the name and address of the vendor who is selling the spurious medicines, and likewise the name and address of the House in the United States, or elsewhere, which may have supplied them, so as to enable me, for the protection of the public, to institute proceedings against such evil doers, and I engage to remunerate very handsomely any person who may give me such information, the informant's name never being divulged.

Should any person have reason to believe that he has been deceived by buying spurious imitations of these Medicines, he will do well to send me, in a letter, to the address at foot (which he can do at a cost of six cents in postage,) one of the books of instructions which are affixed to the same. I promise to examine it and send a reply, stating whether the Medicines are genuine or not, so that if spurious he may apply to the person from whom he purchased them to have his money returned.

Chemists and Druggists who desire to obtain the Medicines can be supplied at the lowest wholesale prices in quantities of not less than £20 worth—viz., 8s. 6d., 2s., and 3s. per dozen boxes of pills or pots of Ointment, nett, without discount, for which remittance must be sent in advance.

I have the honour to be, With great respect, THOMAS HOLLOWAY. 553, Oxford Street (late 244, Strand) London, W.-C., October 1, 1871. June 5 6 m

AGRICULTURAL IMPLEMENTS.

The perfection of Mowers. The Meadow King Mower introduced into Nova Scotia last season, by James P. Dodge, is the most perfect Mower ever invented, it will mow where every other kind has been clogged, the Knives will run in any position, either horisontal or perpendicular. A Sample Machine can be seen at the Subscribers, who is Sole Agent for Nova Scotia.

Address, JAMES P. DODGE Middleton, Annapolis Co. April 15. 9 m.

WINDSOR & ANNAPOLIS RAILWAY. CONDENSED TIME TABLE. JULY, 1872.

HALIFAX TO ST. ST. JOHN.

Table with columns: STATIONS, Exp. Acc. Pass. Lists train schedules from Halifax to St. John.

ST. JOHN TO HALIFAX.

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Steamer "Empress" or "Scud" leave St. John on Monday, Wednesday, Friday and Saturday, at 8 a.m., for Annapolis, returning on Tuesday, Thursday, Friday and Saturday on arrival of Train from Halifax.

International Steamers leave St. John on Monday, Wednesday, and Friday, at 8 a.m., for Eastport, Portland, and Boston.

Trains of the Western Extension Railway leave St. John at 7.30 a.m. every day for Woodstock, Fredericton, St. Stephens, Bangor, Portland, Boston, and all parts of the United States and Canada.

Tickets by above routes to all parts in the United States and Canada may be obtained at 105 Hollis Street, Halifax, at Richmond, and the principal Stations on the Railway.

NEW SPRING GOODS!

Ex "Moravian," "Olympia," "Tiger," "Caspien," &c.

BRITISH WOOLLEN HALL, 132 & 134 Granville St.

JENNINGS & CLAY HAVE much pleasure in announcing to Wholesale and Retail Customers and friends, that their Stock of BRITISH AND FOREIGN DRY GOODS, Ready Made Clothing, Gents' and House Furnishing Goods, &c., is now COMPLETE in every Department to which they invite their attention.

"EDITH EMILY."

100 Bundles and 3 Cases WHITFIELD'S Celebrated IRON BED-STEADS. PATENT CHAIR BEDSTEADS, INVALID BEDSTEADS, COTS, STRETCHERS, &c.

Fitted with dove-tail joints, warranted not to break. Selling off at a small advance on cost. McEWAN & CO. Sole Agents. 20 Barrington Street, 1m.

July 10. To Parents and Sabbath School Teachers.

JUST PUBLISHED. SECOND EDITION—REVISED.

A SCRIPTURE CATECHISM, for the Family, the Bible Class, and the Sabbath School, BY S. SELDEN.

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