

Agriculture.

A TALK ABOUT DRAINING.

The question of under-draining on farms is one on which much has been said and written. Our farmer readers will be interested and perhaps, may receive some suggestions that may be serviceable to them from the following talk, taken from the Canadian Farmer:

"How did the field turn out you were about to ditch?" "It did nothing the first and second years. It was one mass of strawberry plants when it was dry, and there was a great swale right across the hundred acres; so that with foulness of the dry peat, and the flooded state of the wet, I did not realize any sort of profit, and hardly expenses, from my crop, so that although it was rented land, I determined to drain it, and I did so."

"Did you tile drain it?" "No; I ditched it, and made a real good job. I always ditch with the plough and scraper. My boys don't like to work in the wet; neither do I; so we work for a dry time, and then put in the plough with a good strong team. We plough out as much as we can, and then get scrapers to work, each with a team. We take out the loose soil with the scraper, and remove it to low places, so that we both ditch and raise depressed places at the same time, and fill up runs and gullies where they are not wanted. After going over the ground once, and removing all that the plough has moved, we plough again, and again scrape out. I never leave steep sides to my ditches; but prefer depressions in the ground; and for that purpose, wherever it wants it, we cross the ditch with the scrapers, as well as go lengthways. This saves future trouble, and all danger to sheep or cattle or horses, by getting on their backs in the ditch, and so being lost. Besides, I find that I get better grass in the slope than in the flat, and it all bears a heavy crop, except in just the waterway, and when I put it into grain it bears a splendid crop right down to the water furrow in the bottom. Moreover when I do it in this way, I can always plough across the ditch if I want, and take it altogether it is a much better plan."

"Well, but how about the economy of it? You must move so much earth that it must cost more than common ditching?" "No; it does not. A pair of horses with a good scraper will move an immense deal in a day, and besides can put it just where it is wanted; but if I ditch with the spade, the earth can only be thrown out on each bank as far as a man can heave it; and if you want it to go further you must cart it, and then you have to move it all again, so that it is twice the labour it would otherwise be. And besides all this, myself and my boys think it a deal the best plan for the horses to do the hard dirty work, rather than ourselves."

"But you cannot go deep enough in this way?" "Yes, I can. I have in other places made ditches three and even four feet deep through rising ground; and although they are wider than the actual flow of the water requires, yet I find the profit of it in other ways."

"How long was the ditch in question across the 100 acres?" "It was fully sixty rods long; it averaged two feet deep, and was wide enough for the team all through; it was well sloped at the sides, so that it can never founder with frost or be trodden in by cattle, or fill up in any way; and it only took us three days to finish it—three men and two horses, with plough and scraper."

"Did it answer well?" "Yes, capitally; and this year I have a splendid crop, and good promise for future years. I have all the hollows near by filled up, have got rid of the strawberries and other weeds, and now have a fine field instead of a piece of rough pasture, that was a scandal to the farm. This is not the first work of the kind I have done either for myself or others, and I have always succeeded well, and the work done in this way has given the best of satisfaction. You will see that this ditch has not cost me, even at a dollar a day wages for the men, and two dollars for the horses, quite 25 cents a rod; and we have moved from three to four times as much earth as we could have done with spades and shovels, besides doing it for all time, for this will never founder or be trodden in by cattle, and all it can ever want again is a double furrow

in the bottom of it, and generally a single turn water furrow will be sufficient. Besides, at the above rates you will see that we have earned excellent wages, although of course we don't found much on that."

I enquired the shape of his scrapers. He said they were of the ordinary kind, square across the edge and wide, so that they would take up moved earth.

I suggested a scraper made half circular like a sugar scoop, such as is used by grocers, with a sharp cutting edge.

My friend caught at the idea, said that a machine of that kind would work well, and would face any ordinary ground, without ploughing, so that he could complete the work as he went, and be always working against a breast of earth; besides, he could finish the sides much better, as he could trim off small places which required it, and it would be saving the going over the ground a second time. If he could have found such a scraper, he would have purchased one at once; but as my circular scraper was only an ideal one, I could not recommend him to a manufacturer. I have no doubt, however, he will eventually get one made.

This was a hard-working, well-doing man, who has rendered himself independent as a farmer, and has settled a large family prosperously. He was, I believe, originally an English labourer, who came to Canada to "better" himself, and he has succeeded.

Scientific.

ARTIFICIAL IVORY.—Artificial ivory is now produced from India rubber by means of a simple and ingenious process. In the first place, two pounds of pure rubber are dissolved in 32 pounds of chloroform, and the solution is then saturated with a current of ammonia gas. When the rubber has been completely bleached, the admission of the gas is interrupted, and the mass is transferred to a vessel provided with a stirrer, in which it is washed with hot water until the bleaching agent has been entirely removed. During this operation the temperature may be increased to 185 degrees Fahrenheit, in order to evaporate the chloroform, which, by conducting it in an apparatus of condensation, may again be made use of. The remaining product forms a kind of froth, which being pressed out, dried, and again treated with a small quantity of chloroform, is finally obtained as a consistent paste. This paste is now mixed with a sufficient quantity of finely pulverized phosphate of lime, or carbonate of zinc, until it assumes the appearance of moist flour. In this condition it is pressed in hot moulds, which leaves it sufficiently hard to be turned, planed, filed, or bored. In order to imitate corals, pearls, enamels, hard woods, etc., it is only necessary to mix the paste with the desired colors previously to its being compressed.

Sheet-zinc for roofing is, in many respects, very useful, but hitherto it has not been found to be durable. A French inventor has introduced a zinc white paint, with silicate of potash as a vehicle, which is said to be exceedingly durable, and to keep the roofing very cool.

A piece of building land, at the corner of the new Queen Victoria street, in London, has just been let at a rental of £5,500 per annum, being at the rate of about five dollars per square foot.

A Paris scientific journal says that petroleum can, by a new process, which is not published, be converted into a permanent solid, which will burn without liquefying, and be preserved a firm mass for any period of time.

LEMON FOR A COUGH.—Roast the lemon very carefully without burning it; when it is thoroughly hot, cut and squeeze into a cup upon three ounces of sugar, finely powdered. Take a spoonful whenever your cough troubles you. It is good and agreeable to the taste. Rarely has it been known to fail of giving relief.

A correspondent of the English Mechanic suggests two new uses for india rubber. One is for springs for locks, especially on gates and in other places exposed to the weather; the other is for proportional measuring, and the mode of application for this purpose will be obvious to our readers.

MESSINGER ALMANACK.

DECEMBER, 1871.

Last Quarter, Dec. 5th, 2h. 31m. morning. New Moon, " 11th, 11h. 47m. afternoon. First Quarter, " 18h, 4h. 27m. afternoon. Full Moon, " 25th, 5h. 20m. afternoon.

Table with columns: Day, SUN, MOON, High Tide. Rows for days of the month from 1st to 31st.

THE TIDES.—The column of the Moon's Position gives the time of high water at Parrsboro', Cornwallis, Horton, Hanisport, 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.

A. V. P. B.

ARCHIBALD'S VEGETABLE PAIN BALSAM is an article worthy of patronage and should be found in every house. It is equal if not superior to any other Pain Killer now in use. Also, Archibald's Cough Mixture for Coughs, Colds, and all Lung Diseases.

The Proprietor has removed to Truro, Colchester Co., N. S., is now extending his business, and will be prepared to furnish his numerous patrons with the above, as well as many other valuable remedies compounded by him.

Sold by all the principal Dealers and Druggists in the Provinces. Oct. 21. 1 yr.

Wholesale Dry Goods Warehouse, Fall—1871. 95 & 97 GRANVILLE STREET.

ANDERSON, BILLING & CO. HAVE now completed their Importations for this Season.

They invite Wholesale Buyers to an inspection of their Stock, which, being purchased at prices much below manufacturers' present rates, will be found deserving of attention. ANDERSON, BILLING & CO. Sept. 27.

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A New and Popular Series of Instruments.

The Manufacturers, desirous of meeting the general desire for organs with all substantial excellences and at a moderate price, have designed and made a series of styles that are in all respects superior to any instruments of similar price; namely from \$10 to \$200.

Not only are the cases of new and tasteful designs, but every part of the mechanism has been subjected to the most careful scrutiny in order to combine all the elements that can be looked for. Numbers One, Two and Three are designed for private use. Number Three has a new and exquisite Solo stop, named THE KALOPHON.

The tone possesses a most fascinating quality, closely resembling the real VOX HUMANA, being delicate and sympathetic and free from the disagreeable tremor that haunts most of the imitated VOX HUMANA stops. Numbers Four and Five will sound especially effective in churches of moderate size. Number Four has an Octave of Sub-bass, and Number Five both Sub-bass and an Octave Coupler, giving a great increase of power, but with no sacrifice of sweetness.

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Cures LIVER COMPLAINT, DYSPEPSIA, ACIDITY OF THE STOMACH, DEBILITY and PAIN in the BACK, RESTORES THE VITAL ENERGIES, when exhausted, braces up both the Nervous and Muscular System, PURIFIES the BLOOD, and Restores the Appetite.

Particular attention is called to the fact that the PERUVIAN BITTERS

are not an Alcoholic preparation, but simply a scientific combination of valuable Roots and Barks, which purify the Blood and restores the waste, thereby bracing up both the Nervous and Muscular Systems, and giving that permanent HEALTH, STRENGTH and VIGOR both of mind and body which nature intended man should possess.

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Although these BITTERS contain no Alcohol, they will most effectively wean the taste from Stimulants and enable the system to dispense with them at once.

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CERTIFICATES:

I have found Mr. Eagar's PERUVIAN BITTERS beneficial to myself and in my family, and have heard of their being used with good effect in another case in Windsor. (Signed) HENRY HOW, D.C.L. King's College, Windsor.

MR. EAGAR,—I have used your PERUVIAN BITTERS in a personal case of Dyspepsia, and have derived the greatest benefit therefrom. (Signed) C. HADY, Capt. R. A.

LUNENBURG, 28th June, 1869. MR. EAGAR,—I have used your PERUVIAN BITTERS and can highly recommend them, as I have derived great benefit therefrom. (Signed) EDWARD H. SOLOMON, Dy. Surveyor, Co. Lunenburg.

I have tried Mr. Eagar's PERUVIAN BITTERS, and can strongly recommend them. (Signed) DUDLEY DE CHAIR, Halifax, June 3, 1869.

FOR SALE in large bottles at 37 1/2 cts. per bottle, and in one dozen and three dozen boxes. Orders from the country will receive immediate attention. Dealers Supplied on liberal terms.

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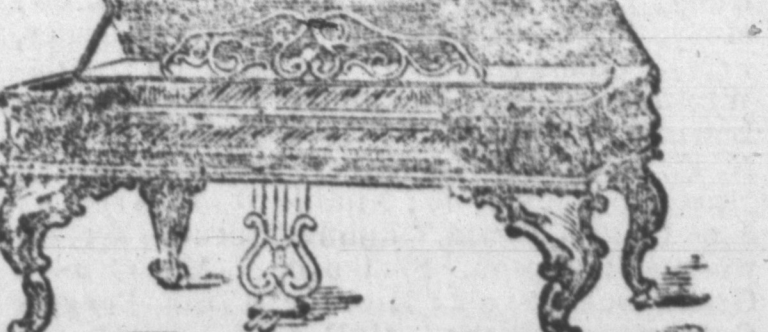
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