

Agriculture.

TO GET GOOD WELL WATER.—In answer to an inquiry, B. G. in Scientific American says:—I have the best pump of water in the neighbourhood; my plan was the following: Hang in the well; suspended (by a string) a coarse canvas bag, with three or four goose sized lime stones and one or two lumps of charcoal in it. Have a string long enough to nearly reach the bottom of the well. In a week or two take out the charcoal, throw back the limestones into the well, with five pounds of soft coal. Put a round or square wooden shoot up at the back of the pump, carrying the shoot up higher than the pump for free ventilation. If the pump is out of doors put a "tee" on the top; if under cover a fine wire gauze will do.

KNOWLEDGE AGAINST "LUCK" IN BEE-KEEPING.—The remark often made, that "I am not lucky with bees," by many of the farmers of the country, shews the necessity of more energetic action on the part of the true lover of apiculture in disseminating among the reading masses a better understanding of the natural history of the honey bee, and the needed care and attention that will soon convince the farmer of average intelligence of the fallacy of that bugbear of bee keeping "luck."

It could be asserted with as much reason that the man who rears hogs, horses, or chickens, can do so without any knowledge of their natural wants and be governed by a blind confidence in his luck, and the ability of such creatures to care for themselves, as to claim this for the governing rule for the bee-keeper. For he who cares for his bees, with a knowledge of their wants, in the same manner he would care for the others, will without doubt reap a reward which will thrice repay him for that care.

SMALL HORSES.—The Southern Farmer says: "The arguments may be all in favor of great size, but the facts are all the other way; large horses are more liable to stumble and be lame than those of the middle size. They are clumsy, and cannot fill themselves so quick. There is nothing more surprising to Western men than to visit Montreal and see the small but stout, Canadian horses hauling large two-seated carriages full of people with apparent ease. A horse weighing 900 pounds in Maine takes a Chase or Concord waggon, with two men in it, and makes fifty or sixty miles a day over hills that might have terrified Hannibal. But their weight is where it ought to be. It is compact, and not lying round loose. It is muscle, not pulp, that we want in a horse."

SPRING HARROWING.—We have successfully harrowed wheat in spring, repeating the operation two or three times at intervals of about a week, until the wheat was a foot high or more. The result was quite successful, and the crop was increased over five bushels per acre. The implement used was the smoothing harrow, which pulverizes the earth without injuring the plants. At the last harrowing, clover seed was sown, and it took better than another sowing early in spring in the usual way without harrowing. This mode of harrowing may be applied to wheat sown broad-cast or drilled equally well, and it makes little difference whether the harrow is run with or across the drills. We do not see any advantage in rolling wheat—except in case the wheat has been heaved by frost, when it has been thought useful by pressing the plants back into the soil.—Albany Cult.

SWINE.—Let pigs of all ages have access to a mixture of ashes, salt, and sulphur. Keep the pens and troughs clean. Let them have a dry, warm well-ventilated place to sleep in. Do not put too many in a pen. Keep the younger and weaker separate from the older and stronger. Feed according to what the pigs are designed for. Lameness of pigs and loss of the use of the hind legs is believed by a correspondent of the N. E. Farmer, to be a species of founder caused by highly concentrated or oily food, such as corn meal or milk in large quantities, and which he has cured by bleeding—by cutting off the end of the tail, repeating the operation two or three times if necessary. He has never known it to fail to cure.

The western wits call bigamy Utah-izing the female sex.

Scientific.

SUPERFLUOUS FLESH.

Not long ago a gentleman of three-score, who had hardly ever been sick in his life, thought he was getting too fleshy and began to Bantamize. He succeeded famously, and boasted to his friends that he had got rid of ten pounds in a few weeks. A little later he was attacked with a painful and dangerous malady, from which he has been suffering for more than a year. If a man can sleep soundly, has a good appetite, with no unpleasant reminders after meals, the bodily habits being regular every day he had better leave himself alone, whether he is as big as a hogshead, or as thin and dry as a fence rail. Several cases of Bright's disease have been reported by medical men of reputation as a direct result of practicing Bantam's plan for getting lean. The very best and safest plan to get rid of fat is to work it off.

This may be aided by eating food which contains a large amount of nitrogen and a small amount of carbon. Nitrogen food is that which gives strength, power to work; as lean meat. Carbonaceous food are those which make fat, such as cheese, potatoes, rice, corn, peas, beans, tapioca, arrowroot, corn starch, milk, sugar syrup, and all oily and fat food. Raw fruit and berries largely eaten are great aids to reducing weight. But, after all, the great reliance should be on exercise and work in the open air. Barclay, the great English pedestrian, who performed greater feats than Weston, lost ten pounds in two or three days walking, and was never the worse for it.

OLD SHOES.—You probably think that if you look very sharply at an old shoe when you throw it away, you will know it again if it ever comes back to you. But that doesn't at all follow. One of these days you may button your dress with an old pair of slippers, comb your hair with a boot, or grasp a cast-off gaiter while at your dinner. You don't see how this can be? Well, we'll tell you. Old shoes are turned to account by manufacturers in the following manner: They are cut into very small pieces and kept for a couple of days in chloride of sulphur. The effect of this is to make the leather hard and brittle. Next, the material is with drawn from the action of the chloride of sulphur, washed with water and dried. When thoroughly dry it is ground to powder, and mixed with some substance like glue or gum that causes it to adhere together. It is then pressed into molds and shaped into buttons, combs, knife handles, etc. So you see how it may come to pass that you will comb your hair with a boot, and fasten your clothes with a slipper.—Exchange.

THE WINE OF LIFE.—There is nothing better for a human being, sometimes, than a little hearty praise. Many good people conscientiously act on the directly opposite, and seem to think nothing better than a little hearty blame. They are mistaken, be conscientious in their blame as they may. There are sore burdens enough in life, bitterness and pain enough, hard work enough, and little enough for it, enough to depress a man and keep him humble, a keen enough sense of failure, succeed as he may, and a word of hearty commendation, now and then, will lighten his load and brighten his heart, and send him on with new hope and energy, and if he have any reasonable amount of brains at all, will do him no harm. Sincere commendation is the wine of life. He who withholds it, when he can give it, is a churl; a churl from the best of motives, but he is a churl nevertheless.—H. M. Thompson.

WHAT IS HEAT LIGHTNING?—The flashes of lightning often observed on a summer evening, unaccompanied by thunder, and popularly known as "heat lightning," are merely the light from discharges of electricity from an ordinary thunder-cloud, beneath the horizon of the observer reflected from clouds, or perhaps from the air itself, as in the case of twilight. Mr. Brooks one of the directors of the telegraph line between Pittsburg and Philadelphia, informs us that on one occasion, to satisfy himself on this point, he asked for information from a distant operator during the appearance of flashes of this kind in the distant horizon, and learned that they proceeded from a thunder storm then raging two hundred and fifty miles eastward of his place of observation.—Prof. Henry.

AN IMMENSE GRAPE VINE.—The Santa Barbara (Cal.) Press correspondent says:

"I have seen the 'Big Grape Vine.' The owner says it is forty two years old. The trunk is nearly circular, and at ten inches from the ground is thirty nine inches in circumference; at three feet from the ground, the smallest place, it measures forty-six inches in circumference; immediately above this measurement it swells out much larger and parts into branches. It is supported by a frame-work six to seven feet high, containing sixty-six posts from three to eight inches in diameter, and covers about 4320 square feet of ground.

"Several of the limbs are nine feet in circumference at thirty feet from the trunk, and one of the branches at forty-eight feet from the trunk is seven and three-eighths inches in circumference. It now has over 5,000 clusters of grapes on it growing finely. The owners and others familiar with it, tell that the clusters will average, when ripe, about two and a half pounds each but call them two pounds each, and it makes over five tons of fruit from one vine in one year. Several persons made estimates on it last year, when the fruit was ripening, by counting the clusters on ten square feet, and weighing some average clusters. Their estimates varied four to six tons. This is probably the largest grape vine in the world."

THE MOON.—Lord Rosse has proved by recent experiments that the moon sends earthward both reflected heat, and heat which has been first absorbed by itself and then given out again. The lunar night of fourteen days brings a more than Arctic cold, which changes during the lunar day of two weeks continuous sunshine to heat excelling that of boiling water.

For physis, substitute exercise and temperance. Better health and more money in the pocket will be among the happy results of the change.

READ THIS!

A valuable Property for sale, consisting of THREE HUNDRED ACRES of land, situated Ten miles from Weymouth Bridge. There are One Hundred Acres cleared, and cutting Twenty-five or Thirty tons of hay, with plenty of pasture. There is a good Dwelling House with barn and other out buildings. Also, Two never-failing wells of water. There is

A LARGE ORCHARD

of Apple and Cherry trees chiefly grafted fruit. Also, SEVEN HUNDRED AND FIFTY ACRES OF LAND well timbered with Pine, Spruce and Hard-wood, with a good Saw Mill in the centre. The above property is conveniently situated for three farms, as the road passes through the centre. It is also crossed by the Annapolis and Yarmouth Railway line. Parties desiring to purchase can have possession at any time with Crops, Stock and Farming implements if they wish. For further particulars apply to JOSEPH SABEAN, Riverdale, Digby Co., May 23, 1873. 6ius. pd.

Joyful news for the Afflicted.

GATES' Life of Man Bitters.

Mrs. Eliza Rhynd, of Annapolis county, in the Province of Nova Scotia, maketh oath and saith that a year ago last September her husband purchased a bottle of Dr. Caleb Gates' eye relief for the purpose of applying it for the cure of sore eyes, and seeing on the label of the bottle that it was recommended for the Piles also with which she had for a long time been most painfully afflicted, and had applied to different doctors in her own neighborhood and had tried various remedies and found no permanent relief, tried it for the piles also and in a very short time was perfectly cured of both complaints by the use of only one small bottle. She had also been subject to very frequent turns of fainting, sometimes as often as three times a day, and having by this time moved into the more immediate neighborhood of Dr. Gates, she commenced taking his Life of Man Bitters and Syrup about the first of May last, and is most happy to say that through the kind Providence and the skill of Dr. Gates she has not had one of her former fainting turns since the month of June last past, and she has frequently taken the Bitters and Syrup for colds, etc., and has invariably found unalloyed relief in the use of the above medicines.

Sworn to at Middleton, this 3rd day of February, 1873, before me, JAMES WHEELOCK, J. P.

PRICE. Bitters \$1 per bottle; Syrup 50 cents per bottle; Liniment 25 cents per bottle and the ointment 25 cents per box. Address CALLEB GATES & CO., Farmington, Wilmot, 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. Cogswell, Kentville. Sheffield & Wickwire, Canning. GENERAL AGENT, JOHN K. BENT, 126 Granville Street, Halifax. July 2.

HALIFAX, N. S., AUGUST 6, 1873.

MESSENGER ALMANACK.

Table with columns for Day, SUN, MOON, High Tide, and Low Tide. Rows list dates from 1st to 31st of August 1873.

THE TIDES.—The column of the Moon's Southing gives the time of high water at Parrsboro', Cornwallis, 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, 30 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.

NOTICE.

The Subscriber offers for Sale his well known Farm, Situate in Wilmot, County of Annapolis, on the North back road, about one half mile east from the Wilmot Spa Springs, and about one and a half miles from the Railroad Station. Said farm contains 125 acres of very valuable land, advantageously divided into Hay, Pasture, and Woodland. The hay and tillage land are under a superior state of cultivation, the pasture is of an excellent quality, and wood lot sufficient to supply a family for generations to come. On the Farm is a comfortable House of Size and accommodations to suit a large family. Also 2 good Barns, with other convenient out buildings all in good state of repair. An abundant supply of water is carried into the House by pipes from a never failing Spring, and also taken for the use of the barn.

There are about 100 grafted apple trees producing from 60 to 200 barrels annually. This property is so well known that further particulars are unnecessary. The terms of payment will be made easy, only a small proportion will be required down, with good and approved security for the remainder.

The stock and farming utensils can be had by a purchaser of the farm if required. For further particulars apply to the owner on the premises. GEORGE BALLENTINE, Wilmot, County of Annapolis, January 22nd, 1873. Jan. 29



Superior Pianos,

IN VARIOUS STYLES UPRIGHT, OBLIQUE, SQUARE, ETC.

With all the latest improvements, manufactured by the subscribers, and especially adapted to this climate. An assortment of THE "SILVER TONGUE."

A very fine toned CABINET ORGAN, by Carhart and Needham, N. Y. The above are offered to a discriminating public at moderate prices.

WM. FRASER & SONS, June 1. 70 & 72 Barrington St.

H. G. LAURILLIARD, FAILOR,

GENTLEMEN'S DRESS MATERIALS, AND Furnishing Goods constantly on hand

Agent for the NEW YORK FASHION PLATES.

231 HOLLIS STREET, HALIFAX, N. S. May 17. 1vr.

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. Price 5 cents or \$5.00 per 100.

Boarding House,

The subscriber has taken his old stand, No. 30 DOCK STREET, AND IS PREPARED TO RECEIVE TRANSIENT BOARDERS. G. M. BURNS. St. John, N. B., May 13th, 1873. May 28. 2mts. pd.

WANTED,

A Lady of some experience, competent to give instruction in Music, and French and Drawing, and to take the general oversight of young ladies at a public school. Apply at the "CHRISTIAN MESSENGER" Office, Halifax, N. S. July 2.

INTERCOLONIAL RAILWAY.

1873—Summer Arrangements—1873

COMMENCING ON MONDAY, 26th May, 1873.

No. 1. (Through Passenger Express) will leave Halifax at 7.30 a. m., and be due in St. John at 3.30 p. m. This train will stop (between Halifax and Truro) only at Windsor Junction and Shubenacadie; and (between Painesec and St. John) only at Booking Stations, except where it may be necessary to cross other trains or to put down passengers who may have got on board at Painesec and stations East and South of that place.

No. 2. (Through Passenger Express) will leave St. John at 8 a. m., and be due in Halifax at 8.50 p. m. This train will stop (between St. John and Painesec) only at Hampton, Sussex, Petitediac and Moncton; and (between Truro and Halifax) at Shubenacadie and Windsor Junction, except where it may be necessary to cross trains or to put down passengers who may have got on board at stations North and West of Truro.

No. 3 and 5. (Pictou Passenger Accommodation) will leave Halifax at 6.15 a. m., and be due at Pictou at 12.15 p. m.

No. 4 and 6. (Shediac Passenger Accommodation) will leave St. John at 7 a. m., and be due at point DuChene at 12.15 p. m.

No. 7 and 9. (Freight and Passenger Accommodation) will leave Halifax at 11.30 a. m., and be due at Pictou at 8.15 p. m.

No. 8 and 10. (Freight and Passenger Accommodation) will leave St. John at 10.50 a. m., and be due at Point DuChene at 7.25 p. m.

No. 11. (Truro Freight) will leave Halifax at 3.30 p. m., and be due at Truro at 9.10 p. m.

No. 12. (Passenger Accommodation) will leave Painesec at 4.20 p. m., and be due at Point DuChene at 5.00 p. m.

No. 13. (Truro Passenger Accommodation) will leave Halifax at 5.15 p. m., and be due at Truro at 8.15 p. m.

No. 14. (Passenger Accommodation) will leave St. John at 2.00 p. m., and be due at Hampton at 3.10 p. m.

No. 15, 17 and 19. (W. & A. R.) will leave Halifax for Windsor Junction at 8.00 and 8.45 a. m., and 3.00 p. m.

No. 16. (Petitediac Freight) will leave St. John at 2.45 p. m., and be due at Petitediac at 8 p. m.

No. 18. (Sussex Passenger Accommodation) will leave St. John at 4.40 p. m., and be due at Sussex at 6.40 p. m.

No. 20. (Truro Passenger Accommodation) will leave Truro at 6.00 a. m., and be due in Halifax at 9.15 a. m.

No. 21. (Sussex Passenger Accommodation) will leave Sussex at 7 a. m., and be due in St. John at 9.00 a. m.

No. 22. (Truro Freight) will leave Truro at 6.45 a. m., and be due in Halifax at 1.20 p. m.

No. 23 and 25. (Shediac Passenger Accommodation) will leave Point DuChene at 6.50 a. m., and be due in St. John at 12 noon.

No. 24 and 26. (Freight and Passenger accommodation) will leave Pictou at 6.00 a. m., and be due in Halifax at 2.35 p. m.

No. 27. (Petitediac Freight) will leave Petitediac 7.00 a. m., and be due in St. John at 1.30 p. m.

No. 28 and 30. (Pictou Passenger Accommodation) will leave Pictou at 1.45 p. m., and be due in Halifax at 7.30 p. m.

No. 29. (Passenger Accommodation) will leave Hampton at 5.45 p. m., and be due in St. John at 8.55 p. m.

No. 31 and 33. (Shediac Passenger and Freight Accommodation) will leave Pt. DuChene at 10.30 a. m., and be due in St. John at 7.45 p. m.

No. 32, 34 and 36. (W. & A. R.) will be due in Halifax at 11.00 a. m., 6.45 p. m. and 8.25 p. m.

No. 35. (Passenger Accommodation) will leave Point DuChene at 3.20 p. m., and be due at Painesec at 4 p. m.

No. 37 and 39. (Truro and Moncton Freight Passenger Accommodation), will leave Truro at 9.30 p. m., and be due at Moncton at 8.10 a. m.

No. 38 and 40. (Moncton and Truro Freight and Passenger Accommodation), will leave Moncton at 6.45 p. m., and be due at Truro at 5.30 a. m.

LEWIS CARVELL, General Superintendent. RAILWAY OFFICE, Moncton, 19th May, 1873. May 21.

THE CHRISTIAN MESSENGER

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