

Agriculture.

IMMENSE WHEAT FARMS.

There are three wheat farms in the San Joaquin Valley, with areas respectively of 36,000 acres, 23,000 acres, 17,000 acres. On the largest of these farms the wheat crop this year is reported to be equal to an average of 40 bushels to the acre, the yield running up on some parts of the farm to 60 bushels. The product of this farm for the present year is 1,440,000 bushels. The boundary on one side of this farm is 17 miles long. At the season of plowing, ten four-horse teams were attached to ten gang plows, each gang having four plows—or forty horses with as many plows were started at the same time, the teams following in close succession. Lunch or dinner was served at a midway station, and supper at the terminus of the field, seventeen miles distant from the starting point. The teams returned on the following day. The wheat in this immense field was cut with twenty of the largest reapers. It would require over forty ships of medium size to transport the wheat raised on this farm to a foreign market. Even the sacks required would make a large hole in the surplus money of most farmers. We have not the figures for the product of the other two farms; but presume that the average is not much below that of the first. There are thousands of tons of wheat which cannot be taken out of the valley this season, and must remain over as dead capital, or, what is nearly as undesirable, will only command advances at heavy rates of interest.—Bulletin.

GREEN FOOD FOR FOWLS.—The last requisite in the shape of diet is a regular supply of green food. Here, again, fowls kept on grass will need no attention; but for birds penned up, the daily provision of it is an absolute necessity, though most beginners are ignorant of it. The best substitute for natural grass is a large, fresh turf, thrown in daily, to each four or five hens; and even in towns it is often possible to procure this by giving children a few pence every week to keep up a regular supply. Where turf is not allowed to be taken, grass may be cut or pulled, but in this case must be cut into chaff with shears or a chaff machine.

SHEEP.—There is nothing so essential to the health of sheep as dry land, shelter from storms, and fresh air. Low, wet land, dirty yards, and close damp quarters are fatal to their health and vigor. In dry weather, no matter how cold it may be, sheep are better in the field, but during storms, they should be brought into the yards and kept dry. If they do not go under cover of their own accord, they should be driven in and shut up until the storm is over. Animals do not always know what is best for them. "Nature" is all very well, but reason, observation, and experience, are far better. But we repeat that the shed or barn must be dry, clean, and well ventilated. In the summer and autumn, grass is often too succulent and deficient in nutriment, and it is very desirable to give sheep access to good hay, and a half pint of grain each per day, or a pint of bran, can often be fed to great profit.

Lice on cattle may be effectually destroyed by the use of carbolic soap or carbolic powders, without injury to the cattle, or other animals to which the remedy may be applied. Other insects may be destroyed by the same means. Salt is said to be a sure exterminator of lice also. Coal oil and hog's lard, in equal parts, is also an effectual remedy for vermin.

Any one desirous of keeping seed from the depredations of mice can do so by mixing camphor gum with them. Camphor placed in drawers or trunks will prevent mice from doing any injury in them. They object to the odor of camphor, and keep at a distant from it.

"Every cow should fatten one pig" is an old rule and a good one; that is the daily product of a good cow should be, in buttermilk and whey, enough to feed one pig, after the cream and cheese are extracted.

To preserve butter any length of time:—First, work out all the butter milk; second, use rock salt; third, pack in air-tight jars or cans; fourth, put in a cool place, and it will keep for years, if desired.

Scientific.

IMPORTANT MINERAL DISCOVERY IN NOVA SCOTIA.

Our valued correspondent, Captain Beekwith, of Hantsport, Nova Scotia, sends us particulars of the discovery of another economic mineral in Nova Scotia. It is called Kaolin, and is a species of clay from which porcelain is made, and which is formed by the decomposition of orthoclase or potashfeldspar. The substance is found in the vicinity of Annapolis, where it appears on the surface of the ground; and the geological characteristics of the North mountain afford ground for the supposition that further research may develop beds of this most rare and valuable clay in other parts of it. Specimens of the mineral have been sent to Washington and analysed by Dr. Endliche, mineralogist to the Smithsonian Institute, who found in them a small per centage of iron which will have a tendency to color porcelain made from the clay, and also discovered that silica entered into its composition in greater proportion than is the case with the best varieties. It is considered probable, however, that when the bed is cut into, all traces of iron will disappear, as the specimens analyzed were mere surface pickings. Hitherto China has been the only country in the world where Kaolin has been found in sufficient quantities for economic purposes, and of course under these circumstances the Chinese have had a monopoly of porcelain manufacture. If the Nova Scotia Kaolin bed, or beds, turn out sufficiently extensive and the clay proves to be of tolerably fine quality, both of which seem probable just now, this new mineral may be found as valuable as either her gold or her coal. We expect to hear more about the matter before long, and shall not fail to keep our readers fully informed.—St. John Telegraph.

PORTABLE RAILWAY.—One mile of narrow gauge railway has been laid by the military authorities at Aldershot. It is intended as a specimen of what may be applied to military purposes. It is only eighteen inches gauge. The beams on which the train runs are laid on upright, wooden pillars, placed at suitable distances from each other, the car having sets of horizontal wheels, in addition to the usual upright ones, so as to give it stability; whilst the centre of gravity is thrown so low, by the suspension of the carriage from the axle, as to render the apparatus perfectly secure, and to give it the utility of the 3 ft. 6 in. gauge. At the recent experiments the speed attained by the passenger cars was at the rate of 30 miles an hour. The freight trains—each car containing a weight of three tons—averaging a speed of from 10 to 15 miles an hour. Like pontoon bridges, the whole affair can be transported from place to place.

LINEN ARMOR.—A very curious suit of armor, a trophy of the Korean expedition, has recently arrived in this country, and from a description of it, contained in a California paper, it appears that the Eastern warriors must be quite different objects to the mail clad knights of mediæval times, such as figure in the pages of Sir Walter Scott. This Korean suit consists of three pieces, a helmet, a sort of cape to protect the body, and skirt to guard the lower limbs. The entire suit is composed of linen, inside and outside, with thirty thicknesses of the same material for padding. The helmet, which is also made of layers of linen, is further protected by strips of tin, and is surmounted by a brass top. This armor, it is asserted, is both sword and bullet proof. Bullets fired from a revolver at five or six paces, did not penetrate the first thickness of linen, while swords and bayonets, after penetrating a short distance, were turned aside by the succeeding thicknesses.

It is not what people eat, but what they digest, that makes them strong. It is not what they gain, but what they save, that makes them rich. It is not what they read, but what they remember, that makes them learned.

If you would relish your food, labor for it; if you would enjoy your clothes, pay for them before you wear them; if you would sleep soundly, take a clear conscience to bed with you.

HALIFAX, N.S., DECEMBER 25, 1872.

MESSENGER ALMANACK.

DECEMBER, 1872.

First Quarter, Dec. 7th, 7h. 22m. m-rising. Full Moon, " 14th, 5h. 30m. afternoon. Last Quarter, " 22nd, 9h. 57m. afternoon. New Moon, " 30th, 2h. 22m. morning.

Table with columns for Day, SUN, MOON, High Tide, and Low Tide. Rows list days from 1st to 31st with corresponding times and tide heights.

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 55 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.

Joyful news for the Afflicted.

GATES' Life of Man Bitters.

After so much has been said and so much produced in proof of the worth and excellence of Gates's medicines is there one, can there possibly be one, who will have the hardness to stand up in the blaze of the sun light and say they are no good, when so many thousands who have experienced the benefit arising from their use, would come forward and shame those who would oppose such a boon to mankind and gladly and willingly raise their voices in extolling the virtues of these medicines, the healing properties of which have been tested by so many of the sons and daughters of suffering humanity. I can only say for my own part, may the day soon arrive when Gates's combined and valuable medicines shall have a broader and more extensive circulation over the universe, and while with the trowel in one hand and the sword in the other he is working for the good of his suffering fellow beings. May there come forth those who will stand like giants against those who would overthrow and sap the very foundation of the Life of Man to carry out the principles of the wicked one himself when he sought to dethrone the Great Monarch of heaven and take possession of the empire himself. Just so with the evil who would seek to bring into disrepute and destroy Gates's medicines. They have not had skill to compound themselves, and are envious at those who have.

I make these remarks because I have been attacked by those who carry out just such principles as I have above referred to, and probably, I shall be again assailed by them when they see my statement of the blessings I have received from the use of these medicines in my family, or they will probably say they would all have recovered without them. I answer, No. But stand for truth and right.

But to those who have a sincere desire to ask are these medicines really a balm to heal the sick, to such I answer they are a balm, and in every way worthy of the name they bear, namely, Gates's Life of Man Bitters.

HENRY W. MARSHALL. Mr Caleb Gates.—Dear Sir—The Medicines I procured from you, six months ago, while suffering with a severe pain in my left side, relieved me almost instantaneously, and at the same time effectually cured me of a distressing cough which had troubled me for months, since taking your medicine I have not been troubled with either, and I feel bound to recommend it to the public as an infallible cure for the above named disease.

Respectfully yours, B BAKER. Victoria Road, Wilmot, April 16, 1877.

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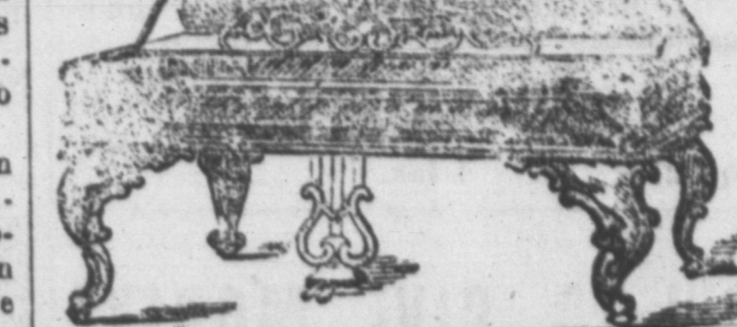
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