Scientific.

CHLORIDE OF LIME. — Comparatively few people know the value of chloride of lime. It is only excelled by carbolic acid in preventing decomposition of animal and vegetable matter, and in removing impure odors. It is a good protection against all malarious diseases, and a small quantity should be kept in a room in an open dish through the warm weather, when such diseases are most prevalent Cellars where vegetables are kept should always be supplied with it. It also drives away vermin Some caution is needed in its use, as it rusts steel and destroys gilt if placed near them. It is an excellent bleaching agent, but clothes bleached with it should be well and thoroughly rinsed, or it will injure them.

AN INSTRUMENT called the Rhysimeter, for measuring the velocity of flowing liquids and the speed of vessels, has recently been invented in England. The instrument, which may be made self-registering, shows in a dial the number of knots the ship has run, and marks on a sheet of paper the speed of the ship at each period during the voyage. Its advantages are very great, and the invention is regarded as a great addition to practical science, being far more reliable than the log as it is not affected by heavy seas. It can be kept in the captain's cabin, and is in appearance much like a barometer.

NEW MILK-PRODUCING TREE.—A new milk-producing tree, in the Valley of the Amazon, has lately been brought to the notice of Europeans. It is known as the *Massaranduba*, and appears to be a species of *Minusops*, of the natural order *Sapotaceæ*. The wood is valuable, and used for various purposes, and the milk flows freely from the trunk upon incision, but hardens on exposure to the air, and then has an elastic property similar to that of gutta-percha. This juice is used as food when fresh, but never in its pure state, being either mixed with a small quantity of water, or with coffee or tea, like ordinary milk. *Ag. Report.*

MR. DION, of New York, has invented an apparatus which, being placed in vessels, will give an alarm when near icebergs. It is to be located in the bottom of the hold, and when the water round the keel is intensely cold—indicating the vicinity of icebergs—it sounds an alarm. This apparatus answers also the purpose of a thermometer, and shows the temperature of the water under the ship. Should it prove successful it will be a great safeguard to life and property in the Northern waters.

A set of paper car-wheels, on one of the Pullman cars running to Jersey City, have run over 160 000 miles of track, and worn out entirely one set of steel tires, which have been replaced. The ordinary wheels, it is said, will only run 60,000 miles.

A magnet, for experimental purposes, has recently been constructed at Ansonia, Pennsylvania that weights 1600 pounds, and has a lifting power of over 30 tons.

"WELL, Sambo, what's yer up to now-a-days?" "Oh! I is a carpenter and jiner." "He! what department do you perform?" "What department? why I does the circular work." "What's dat?" "Why, I turns the grindstone."

The three stages of Darwinism are now said to be, positive, tail; comparative, tailor; superlative, tailless.

An irregular surface of stone, about four feet square, is all that remains of "Plymouth Rock."

Discoveries of fossil ivory are reported in Alaska, especially along the river banks.

Artificial rain, applied in the night, by means of pipes, hydrants, &c., has been successfully tried in England this season. The area treated was about twenty acres, and the production and profits were increased four fold.

The Major says, no matter how honest farmers may be, he never heard of one that wouldn't crib corn.

The recently discovered tin mines in Utah Territory are believed to be richer and more extensive than any others previously known in the world.

Agriculture.

KNOWLEDGE REQUIRED IN FARMING.

There are many who look on farming as rather a small business, who think that it's successful prosecution requires only a little common sense,—just enough to prompt the hardy worker to seek shelter in a rain storm, and a very little knowledge, just sufficient to count a flock of sheep, or read a political newspaper. The opinion was once more general than now, for the world is growing wiser, yet at the present time it is entertained by many. It is an old and true saying, that "honor and shame from no condition rise," that honor is only acquired by acting well our part in whatever situation we may be placed. A man of ability and knowledge, who devotes all his energies to his business will make it honorable and profitable, no matter how insignificant that business may at first seem.

There is no business requiring such varied acquirements, so much knowledge, so much good judgment and commercial ability combined, as is necessary for the thoroughly accomplished farmer. He stands first among the manufacturers of the land, he makes the wheat and corn, the beef and mutton and pork, the wool and flax; and manufactures from the earth, the air, the water, nearly all that we eat and wear: and this is not only done by farmers as a class, but almost every one produces many if not all of these articles.

The manufacturer usually confines his labors to the production of one article, but the farmer is by necessity compelled to make many. If he would make grain he must also make beef or butter and cheese, or mutton and wool. Hence the necessity of extensive knowledge. It is an easy matter for the manufacturer to ascertain how much wool will make a yard of cloth of a certain description, and what will be its cost; it is not so easy for the farmer to ascertain how much grass, or hay, or grain, will make a pound of wool. The manufacturer can test a new machine, and ascertain by a few simple trials whether it will manufacture the desired article cheaper or better than the old one; but to ascertain how a pound of beef can be made the cheapest, what machine will convert hay into rich cheese, in the cheapest and best manner, is a matter requiring a good deal more care and skill.

Among his varied acquirements, the farmer should possess a knowledge of animal physiology, so as to be enabled to keep his stock in health and administer proper remedies in case of sickness. Vegetable physiology, too, must not be overlooked. Every day during the growing season the farmer performs work for the growth of his crops, founded on the known laws which govern vegetable life. Entomology is a science which the farmer is compelled to study to some extent, and often much more perhaps than he desires, but the more he does so the better he is fitted to wage a successful war against thousands of destructive foes.

In addition to all this, the farmer must be a merchant, for he must sell as well as manufacturers. He must in some measure take advantage of the rise and fall of prices, select the best time for selling, and the best market, or after all his toil and anxiety he may find but a poor return.

When we contemplate this subject, at which we have merely glanced in all its bearings, we are led to exclaim: Who is competent to do this work? Heartily do we pity those who think that farming furnishes no scope for the exercise of knowledge or ability. If this opinion were entertained only by those engaged in other pursuits, it would be of no serious consequence; but we judge that many farmers, have themselves imbibed such unfounded and unjust opinion in regard to their calling, and where this is an end to all improvement, and all desire for improvement. A man must have a good opinion for his calling, a proper appreciation of its importance, and the means and information necessary for its successful prosecution, or he cannot hope to succeed.—*Ohio Farmer.*

Scarcely any water was found in Mt. Cenis tunnel, and the workmen were obliged to go outside for their supply.

Bananas have been grown in the botanical gardens at Washington.

MESSENGER ALMANACK.

DECEMBER, 1871.

Last Quarter, Dec. 5th, 2h. 31m. morning.
New Moon, " 11th, 11h. 47m. afternoon.
First Quarter, " 18 h, 4h. 27m. afternoon.
Full Moon, " 26th, 5h. 20m afterno n.

D. M.	Day Wk	SUN. Rises	SUN. Sets	MOON. Rises	MOON. South	MOON. Sets	High Tide at Halifax
1	F..	7 21	4 18	8 22	3 8	10 52	9 59
2	Sa..	7 22	4 18	9 24	3 57	11 32	10 36
3	SU.	7 23	4 17	10 28	4 45	A. 6	11 13
4	M..	7 24	4 17	11 33	5 31	0 34	11 57
5	Tu.	7 25	4 17	morn	6 17	1 1	A. 48
6	W..	7 26	4 17	0 29	7 1	1 23	1 51
7	Th..	7 27	4 17	1 48	7 48	1 48	3 5
8	F..	7 28	4 17	2 58	8 35	2 12	4 13
9	Sa..	7 29	4 16	4 14	9 27	2 40	5 15
10	SU.	7 29	4 16	5 32	10 22	3 12	6 5
11	M..	7 30	4 16	6 51	11 21	3 51	6 52
12	Tu..	7 31	4 16	8 10	A. 25	4 40	7 38
13	W..	7 32	4 16	9 20	1 31	5 42	8 27
14	Th.	7 33	4 16	10 17	2 35	6 53	9 17
15	F..	7 34	4 16	11 3	3 36	8 9	10 9
16	Sa..	7 35	4 17	11 40	4 32	9 24	10 58
17	SU.	7 35	4 17	A. 9	5 23	10 37	11 52
18	M..	7 35	4 18	0 34	6 10	11 46	morn
19	Tu..	7 36	4 18	0 56	6 55	morn	0 45
20	W..	7 36	4 18	1 19	7 38	0 51	1 46
21	Th.	7 37	4 19	1 41	8 21	1 57	2 53
22	F..	7 37	4 19	2 4	9 4	3 1	4 2
23	Sa.	7 38	4 20	2 33	9 50	4 4	5 4
24	SU.	7 38	4 20	3 5	10 37	5 7	5 59
25	M..	7 39	4 21	3 43	11 25	6 9	6 44
26	Tu.	7 39	4 22	4 27	morn	7 7	7 26
27	W..	7 39	4 22	5 18	0 14	8 1	8 3
28	Th..	7 40	4 23	6 14	1 4	8 50	8 40
29	F...	7 40	4 24	7 16	1 53	9 32	9 13
30	S...	7 40	4 24	8 17	2 42	10 8	9 49
31	SU.	7 41	4 25	9 22	3 27	10 37	10 23

THE TIDES.—The column of the Moon's Southing gives the time of high water at Parrsboro', Cornwallis, Horton, Hantsport, Windsor, Newpo t, 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.

ARCHIBALDS 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.

American Organs.

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 for similar prices; namely from $100 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 mis-called VOX HUMANA stops.

Numbers Four and Five will found 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.

LARGER AND MORE COSTLY STYLES

are also offered, of which the catalogue of the manufacturers will give information. Send for circular! Address

The Smith American Organ Co.

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AGENT FOR THE PROVINCE.

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May 17.

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All kinds of work Plated & Gilt.

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One door south of "Right Market,"

HALIFAX, N. S.

Sep. 6. 3m.

WRIGHT'S

Patent Sectional Spring Bed!

THE Subscribers having been appointed Sole Agents in the Province for the sale of this article, recommend it as being the easiest and most comfortable to rest upon, and together with its durability, and the facility with which it can be taken apart and cleaned, they feel certain that it will be found to be a most convenient article.

May 20. GORDON & KEITH.

EAGAR'S

Peruvian Bitters!

COMPOUND

Of Peruvian Bark, Sarsaparilla, Dandelion, Wild Cherry, and other valuable remedies.

AN EXCELLENT

TONIC, APPETIZER, & STIMULANT.

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 purifies 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.

This BITTERS is not sold as a specific for every disease, but in cases of GENERAL DEBILITY and its effects, such as Dyspepsia, Loss of Appetite, Weakness of the small of the Back, Weak Memory, Indspositon for Exertion, Sense of Fullness after Eating, &c., caused by anxiety over exertion, mental or bodily, late hours, and excesses of every kind, it has no equal.

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

The proprietor, although averse to the practice of puffing any medicine, feels it his duty to give publicity to the following certificates.—Hundreds could be added, but such names as Dr. How, Professor of Chemistry at King's College; Capt. Hardy, R. A; Mr. Solomon, Lunenburg; and Dudley de Chair, Esq, Halifax, will be sufficient to establish its reputation as a reliable and valuable medicine.

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. HARDY,
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.

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TOOTH ACHE.

EAGAR'S

ODONTINE ESSENCE

gives instantaneous relief in all cases of Tooth Ache arising from hollow teeth and exposure of the nerve.

Thousands of bottles have been sold and in no case has it failed to give satisfaction.

Be sure and obtain Eagar's Odontine Essense; take no other.

The money will be returned if it fails to give relief when used according to directions in cases of tooth, ache from exposed nerve.

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Being agent for first class Surgical Instrument makers in London and Paris, their respective priced lists can be seen at his establishment.

His knowledge of the London, Liverpool and Parisian Markets, enables him to offer goods at very low prices for cash as will be seen by a few quotations below:

Hair Oil,	at from.... $0 37	per doz
Perfume,	" 0 60	"
Black Cap Pomade,	" 1 00	"
Box Wood top Pomade,	" 1 00	"
Glycerine & Camphor Roll	.... 0 20	"
Soaps,	" 0 25	"

Prices of any articles will be given with pleasure when required.

Should any article purchased at his establishment not prove to be what it is represented, it can be returned at his expense, if not otherwise made satisfactory.

M. F. EAGAR.
149 Hollis St.
Feb. 22. Halifax.

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