

Canadian Slate.

Among our ever-increasing industrial establishments none ought to be more welcome than those using the economic materials which nature has so bountifully scattered throughout the Dominion. By economic materials, we mean those substances which are susceptible of economic application, such as metals, and their ores, minerals, and various manufactures, or in chemical manufactures, materials for bricks, pottery, glass, cements, mortars, or for brilliant, and ornamental purposes. Slate is one of the most important of these. Of it there is an abundant supply, and we are glad now to note an increased energy displayed in the roofing slate industry amongst us.

The permanency of the dark blue color, and other good qualities of the Canadian roofing slate, have been fully attested during the past few years by every roofer in the Dominion. The blocks we have seen are uniform in color, and are capable of being split into thin plates, which have considerable flexibility, and are not liable to break in the process of punching, and laying on.

For roofing purposes, slates are in many ways preferable to ordinary shingles; chiefly because of their safety from the action of fire, their great durability, and their retaining a uniform color, and that one in harmony with the bricks and stone with which the generality of our buildings—ecclesiastic and domestic—are constructed.

Again, when contrasted with tin, or galvanized iron, they are more durable than either, because they are not affected by the action of the weather, and, besides, are more economical, as they can be laid on at far less cost.

The great strength, smoothness, and perfectly non-absorbent qualities of slate, render it, in the form of slabs, well adapted for basement walls, for hall, conservatory, and basement floors, and railway station paving; for shelving, for dairies, and larders, and for refrigerators, cattle troughs, and numerous similar purposes. As a flooring material it is preferable to any cement, particularly where dampness is prevalent.

In the manufacture of billiard tables, it has now entirely superseded all other material. Again, it can be enamelled in permanent colors in imitation of the costly variegated marbles of Italy, Germany, and Spain; the granites, porphyries, Jaspers, and Serpentes of Great Britain; the Malachite, of Russia; the Mosiacs of pietra-dura, of Florence; and may thus be used for chimney pieces, pedestals, for statuary, pilasters, table tops, aquaria, fern cases, jardinières, etc. There is no reason, with the growing wealth of the Dominion, why all these articles should not be manufactured here. Each new industry is in its way helping to increase our commercial greatness as a country.—*W. G. S.*

Farmers' Troubles.

The grasping disposition of our people probably has much to do with their unhappiness. The farmer purchases more land than he can either cultivate with profit, or pay for, even if there are no failures in his crops. The idea that cash capital is required to work a farm with profit, even after it is paid for, seldom enters into the calculation of our farmers. If a man has a thousand dollars, or ten thousand, and desires to purchase a farm with it, he expends the entire amount in land, reserving nothing for working capital. This is about on a par with a man who would invest all his capital in paying rent in advance on a store, and have nothing left with which to purchase goods. Many farmers are at this time heavily in debt, and why? Simply because they have invested too much in land. They have done, and are doing just what the gamblers in stock are doing every day—betting on a rise, or fall, and putting up a small margin to enable them to control a certain amount for a certain time. Pleasures must be uncertain in any business liable to be affected by the fluctuations in the markets, whether the articles to be sold are stocks or farm produce. But if a man owns all that he has in his possession, the rise or fall in prices seldom brings disastrous results.

Now, the farmer who is in debt must get out; better sell one-half, or two-thirds of his farm, and have the remainder clear of all encumbrance, than continue this gambling system of betting on the weather, and future price of grain. Reduce expenses by cutting off interest on mortgages, labor, and implements required to raise crops, the price of which is an uncertainty, and then commence putting what is left in order, taking pleasure in the abundance of good things which surrounds us. Let quality become the standard instead of quantity.—*N. Y. Sun.*

Wages in Europe.

After reading such statements as the following, the wonder is, not that emigration is not more rapid, but that so many people in European countries manage to scrape enough money together with which to seek more profitable fields of labor:—

“Sixty cents a day is considered good wages for a working man in any of the European countries, except Great Britain, where the wages are somewhat higher. In the Tyrol silk region and in Italy, they often do not get more than ten cents. In Sweden, men often work from four o'clock in the morning till nine in the evening, and do not get any more.

“During the late war many poor women in Berlin were hired to knit stockings for the soldiers for five cents. The profits of the poor who keep petty shops, sell trinkets in the streets or act as sutlers, do not average more than three or four per cent. Barbers, since the raising of their prices, get five cents for hair-cutting and two and a half cents for shaving. Servants at hotels get from three to eight dollars a month.—Servant girls in private families often get but ten dollars a year. Sometimes these classes cannot get work at any price.”—*E. C.*

Mind your Business

That economic philosopher, Benjamin Franklin proposed for one of our national coins the legend which forms the heading of this article. For the people of this country then and now, it had and still possesses a peculiar significance, and its value is not impaired by the circumstances of loyalty or time. Its observance would remove one great hindrance to progress, and aid in the development of individual exertion. Yet no man can undertake any new enterprise without being overburdened with, and nearly overwhelmed by gratuitous advice.

If a man invents a machine or improves on any mechanical device, straightway he has a number of advisers who can tell him where he has failed and how he may perfect. If one is ailing it is a curious fact that every friend to whom he reveals his annoyance is a medical adviser and can tell him exactly what to do to find relief. If an accident occurs demanding prompt action and amendment, all the bystanders assume to become directors of the job, and are profuse with advice, but very chary of help.

Probably this disposition to offer unasked advice is shown nowhere so prominently as in the workshop. If a workman has a difficult job to perform he finds plenty of advisers, mainly those who, having had no similar experience can use conjecture instead of fact for a guide. The objects for this gratuitous advice are usually singled from green apprentices, or journeymen new to the ways of the shop. They are considered fair game—proper subjects for experiments—and are tormented, annoyed, and bothered by repeated, antagonistic, and foolish counsel. In mechanics, and in any trade or vocation, it is a matter of pride to the workman to compass his deliverance from an annoying position by his own exertions. A proper pride impels him to prefer his own unaided exertions to the assistance of voluntary teachers, when he needs counsel—the riper experience of his seniors—if he is not foolishly independent and self-willed he will ask it. When desired is the time when it is valuable to him. But every man knows that he achieves a greater triumph and more solid and enduring knowledge by “working out his own salvation” than by depending upon others for assistance.

Undoubtedly the profusers of assistance are often incited by a pure desire to aid; but aid is not appreciated if the recipient does not see his need of it; yet it is always welcome when wanted, and then it will be asked for. If every one attended strictly to his own business, not only would there be more harmony among workers but greater progress would be made in all the improvements designed to aid the race.—*Scientific American.*

Capacity of Cisterns for Every Ten Inches in Depth.

2 feet in diameter.....	19½	gallons.
2½ “ “	30½	“
3 “ “	44½	“
3½ “ “	60	“
4 “ “	78½	“
4½ “ “	99½	“
5 “ “	122½	“
5½ “ “	148½	“
6 “ “	176½	“
6½ “ “	206½	“
7 “ “	238½	“

Cultivating the White Ash.

The value of the white ash for timber is so well known that it may seem almost superfluous to name it. There is scarcely a farm implement, from a rake handle to a reaper or mower, of which the tough white ash does not form a part. But the cultivation of this valuable tree has been, and is still, sadly neglected, in regions where good timber for the purpose named is, and ever will be needed. The time must soon come when the implements required for agricultural purposes on the far western prairies will be manufactured there, and good timber must be had; therefore it requires no great stretch of imagination to see that a profitable market will soon exist far away from the present source of supply. The cultivation of such timber is like money put out at compound interest, and a man investing a very small sum at first will soon find himself the possessor of large and constantly increasing capital. The white ash is a tree easily grown from seed, which may be obtained in unlimited quantities and very cheaply. The seedlings may be easily transplanted without fear of loss, and they will succeed in almost any good rich soil. At first the seedlings appear to make slow progress in comparison with cottonwoods and willows, but when fairly established their growth is rapid and in every way satisfactory. As soon as the trees are a few inches in diameter, the timber is ready for use, and thenceforward continues to increase with age. Farmers who are in need, or liable to be, of good timber, should not neglect the cultivation of this most valuable tree.—*Andrew S. Fuller.*

“How fast they build houses now!” said M.; “they began that building last week, and now they are putting in the lights.” “Yes,” answered his friend, “and next week they will put in the liver.”

“WHAT large chickens these are!” Landlady—“Yes, chickens are larger than they used to be; ten years ago we could not pretend to get chickens as large as these.” Boarder—with an innocent air, “No, I suppose not; these must have grown a good deal in that time.” Landlady looks as though she had been misunderstood.

FORESTS AND FOREST CULTURE.—As an instance of the increased value of land when planted in forest, Mr. Rosenstell, of Freeport, Ill., one of the members of the Illinois Board of Agriculture, at the late meeting of the Board, related an instance of the sowing by his father in Germany of a tract of worthless blowing sand with the seeds of various pines and other evergreens, and that now, this was the most valuable portion of the estate. In North Germany, the conservation of forests is allotted to a carefully-organized body of officers whose chief is a forest-director. In Prussia nearly a quarter of the soil is in forest. In Thuringia and the Hartz mountains a most perfect system of forestry is carried out. In Hanover, 900,000 acres of forest are under the State management.—*Western Rural.*

According to an article in the *Buffalo Commercial Advertiser*, the quantity of grain shipped by canal from that city during the past season, notwithstanding it only continued 189 days—being the shortest on record—was larger than in any preceding year, with the single exception of 1862. In 1862, the aggregate amount of grain shipped by canal reached 53,258,873 bushels; this year, when the Erie Canal had to compete with rival routes, leading in every direction, the aggregate has reached 50,796,676 bush. The movement of wheat has been remarkably heavy, aggregating 21,593,112 bushels, against 10,828,530 bushels last year, and 18,972,756 bush. in 1871. The shipments of corn, however, show a large falling off as compared with 1872. They reach only 21,767,171 bushels, against 30,833,333 bushels in 1872, and 20,663,515 bushels in the year preceding.

TO PRESERVE GREEN TOMATOES.—The following receipt is so generally liked that I consider it well worth the trouble: Take two fresh lemons to every three pounds of small green tomatoes, pare the rinds very thin, so as not to get any of the white part, and squeeze out the juice. I first boil the tomatoes gently until they begin to get tender, in water sufficient to cover them well, then add the lemon, and a few peach leaves, and powdered ginger tied in thin muslin bags, boil together until the tomatoes are tender, take them out carefully, strain the liquor, and put to it one and one-fourth pounds of white sugar for each pound of tomatoes; put the tomatoes into the syrup, and boil gently until they appear to be done. In the course of a week, pour the syrup from the tomatoes, heat it scalding hot, and pour it over them. They resemble the West India sweatmeats.—*Central Union Ag.*