

USEFUL INFORMATION

A thorough application of red lead to iron and steel surfaces exposed to the weather, is said to be the best means of preventing rust.

An artistic effect has been produced by India rubber panels or veneers, which are very beautiful and admit of easy cleaning with soap and water.

There is nothing which will squelch an oil fed fire in its incipency more quickly and effectually than sand—and there are no afterclaps in the way of water damage, either.

Locomotive practice shows that steel stay bolts snap sooner than bolts made from good brands of iron. The fault, which seems to be incurable, lies in crystalline structure of steel.

By the application of chloride of antimony a beautiful violet color is imparted to brass work. The brass should first be made perfectly clean and heated until water will steam off it without hissing.

An engineer asks the following pertinent question: "Who should be the most competent to decide as to the condition of the boiler, the man who owns the boiler or the man who cleans and cares for it?"

A method of stopping cracks in metal is to moisten the cracked surface with petroleum, then wipe it and immediately rub with chalk. The petroleum exudes and shows the exact course of the crack. At the end of the crack bore a hole, and the crack cannot go further.

Don't use resin on belts. It shortens their life in elasticity and durability. Instead, use castor oil; but do not soak the belt in it. Let it run from a small spouted oil can on the belt while it is in motion moving the stream of oil at every round turn of the belt until all has been bathed.

A well-known locomotive engineer declares that if he could invent a red paint that would withstand the action of the fire, he would have no difficulty—by painting the inside of fire boxes with it—in getting certificates of a saving of twenty-five per cent. in fuel.

A writer replying to the query, "What will prevent belts slipping?" says: Let me answer for all—a little common sense. If a man is drawing a hundred bushels of wheat to your mill and the wagon gets stuck, he must either take off part of the load or hitch on more horses. It is exactly the same with a slipping belt. You must either lighten the load or else put on a heavier belt. In 99 cases out of 100 the trouble will be entirely obviated by putting on a double belt. Rest assured that any kind of a daub placed on a belt will be a detriment instead of a help. The belt will run better for a few minutes and then this stuff will collect on pulleys and in places on the belt, making it much worse than ever. The best dressing that I have ever seen for leather belting is a little castor oil.

It does not appear to be generally known that almost any kind of fine dust floating in the air is highly explosive, when the proportion of dust to air reaches a certain percentage. This should be remembered by those who are employed in establishments where quantities of dust, either from sugar, flour, wood, or any other article, is apt to accumulate. Usually the fatal step is made by carrying a lighted lamp into some dusty department. There need be no danger if the objectionable dust is allowed to escape, and there is very little risk if those concerned take pains to keep any flame from the dust-burdened air, though it is advisable to always keep such buildings well ventilated. Experience is beginning to teach that there are many other explosives besides oil and gases. It has been recently reported that an ice factory exploded, so the only safe plan is to exercise care in all departments of manufacture.

All tough timber, when the logs are being sawed into lumber of any kind, whether scantling, boards, or planks, will spring badly when a log is sawed in the usual manner, by commencing on one side and working toward the other. In order to avoid this, it is only necessary to saw off a slab or plank alternately from each side, finishing in the middle of the log. We will suppose, for example, that a log of tough timber is to be sawed into scantling of a uniform size. Let the sawing be done by working from one side of the log to the other, and the end of the scantling will be of the desired size, while at the middle some of them will measure one inch broader than at the ends. After the log has been spotted, saw off a slab from one side; then move the log over and cut a similar slab from the opposite side. Let calculations be made before the second is cut off, so there will be just so many cuts—no more, no less—allowing for the kerf of every cut—about one-fourth inch for kerf. When sawed in this way, the cuts will be of uniform thickness.

CANADIAN LUMBERMEN.

MR. KENNEDY F. BURNS, M. P.

LUMBERMEN come prominently to the front in whatever part of the Dominion they may reside. One of the most extensive operators in any of our Provinces, and holding a first position among the lumbermen who can write "M.P." after their names, is Mr. Kennedy F. Burns, of Bathurst, N.B., and member for Gloucester.

Mr. Burns, was born at Thomastown, in county of Tipperary, Ireland, on the eighth day of January, 1842, and came to New Brunswick when a boy, was educated in Halifax, N.S., and St. John, and from the latter place removed to Chatham, N.B. in 1857, where he was engaged in business with the late firm of Burk & Noonan, and finally settled in Bathurst in 1861, where he began a successful business career. In 1878 he formed a business partnership with Hon. Samuel Adams (now of New York) and his brother Mr. P. J. Burns, the new firm going more extensively into the lumber business, building one of the finest saw mills in the province at the mouth of the Nepisiguit river, opposite the town of Bathurst, and carrying on a general lumber and mercantile business at Bathurst, Caraquet and Petite Rocher.

On the retirement of Mr. Adams, the new firm of K. F. Burns & Co. was formed and carried on the same



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business until May, 1890, when it became merged in the large and important concern—the St. Lawrence Lumber Company, limited, with mills at Bersimis, Que., Bathurst and Caraquet, N.B., and offices in London and Liverpool, Eng. Of this prosperous company, Mr. Burns is the managing director and largest stockholder.

Mr. Burns first entered political life in 1874, when he was elected to represent Gloucester in the House of Assembly, and has ever since been a prominent figure in the political affairs of his county. In 1882 he entered the larger sphere of Dominion politics, defeating Hon. T. W. Anglin in the general election held in that year, was re-elected at the general election of 1887, and has again been returned in the recent election.

Mr. Burns has always been a staunch Conservative, and has been untiring in his efforts to benefit his constituents. Through his strenuous efforts he succeeded in pushing to completion the Caraquet railway, of which he is now president and general manager, a much needed line running from Bathurst to Shippegan and connecting with the Intercolonial system at Gloucester junction.

Straight and square dealing has ever been a motto of Mr. Burns, and to this may be attributed much of his success in life. His is a case where it can be written with all truth, "his word is as good as his bond." It is a compliment to any man to be able to

say that "his best friends know him best." This is Mr. Burns' record. He is kind and generous in disposition and among his workmen and employees everywhere he is very popular. He delights to mingle in the sports and pastimes of the younger men and becoming as it were, "one of the boys." By some of his public opponents he has been dubbed the "boy" a title of which he is very proud.

In his make-up Mr. Burns commands in a large measure the elements that give success in any work of life. Hopeful and energetic, yet shrewd and cautious in every transaction, unassuming in private life, yet recognized by all as a leader among his fellows; affable and courteous in manner, yet decisive in all his actions—he possesses in no common degree the art of winning and retaining the high esteem and respect of his very numerous friends and acquaintances. Having started out with few advantages—intelligent, industrious and self-educated, methodical in all things—he has by his own inherent ability climbed his way to the top of the ladder. He is a lumber shipper, a mill owner, a farmer, a trader, a politician and a horseman; his friends say he is a lawyer as well, but these apparently are but the ephemeral joys of his busy existence.

In private life and among his more intimate friends, Mr. Burns is noted for his geniality and good nature. Nobody enjoys a joke better than he, even when directed against himself, and his keen Irish wit sometimes turns the tables on the joker most effectively.

A GREAT SIBERIAN PINE FOREST.

A RUSSIAN traveler gives an interesting account of the Siberian forest called the Taiga. He says it is so vast that not even the peasants who were born in it, and have lived there all their lives, know how far it extends. The peasants declare that in the winter strangers from the North come on reindeer to sell bread. When people they are, or whence they come, the peasants can not say. They only know that they are not the same race as themselves and do not speak the same language. This mysterious people, it would appear, have never been seen by any one but the inhabitants of the forest, who are themselves almost uncivilized, living upon what they shoot. The trees, which are pine, are wonderfully thick and high, and a dead stillness prevails in summer, an attribute common to all Russian forests. This silence has a peculiar effect on the traveler after he has been journeying for many hours, especially if he is alone. At the end of the first day the traveler says he ascended a hillock, and as far as the eye could reach stretched an endless sea of trees. At the end of the second day only the same scene was to be observed, although he knew that Irkutsk and open land lay beyond.

HIS FATHER GOT THE WRONG END.

THERE was a big buzz-saw boxed up and ready to go on shipboard at one of the South street wharves the other day, when a colored man was noticed walking around it and eyeing it with the greatest interest.

"It isn't running," finally remarked a shipping clerk.

"I kin see dat much," was the ready reply.

"Then what are you afraid of?"

"I isn't 'fraid of nuffin'. Ise simply sorter anxious."

"Ever see one of those things before?"

"Can't say as I hev."

"Then what are you anxious about?" persisted the man.

"See yere, boss," said the other as he retreated a step or two. "I lost my fadder when I was only a baby."

"Well?"

"I lost him kase he walked up the wrong end of a bar, an' I doan' reckon to git cotched in the same way. When I see anything wid teeth to it I either shy off or dodge behind."

It has been calculated that the electromotive force of a bolt of lightning is about 3,500,000 volts, the current about 14,000,000 amperes, and the time about one twenty-thousandth part of a second. In such a volt there is an energy of 2,450,000,000 volts, or 3,284,182, horse power.