

SIR JOHN A. MACDONALD.

THE dead chieftain! So much has been written and said of Sir John A. Macdonald, since he was stricken with paralysis on 29th of May, resulting in death on Saturday, 6th June, that it seems almost a work of supererogation to add another line. And yet, where is the individual or institution, that does not desire, though it may be in the humblest fashion and fewest words, to pay a last tribute to the dead Premier?

Politics are nowhere at the grave of one, who labored for his country's welfare, through a long life time, as did the deceased statesman. Friend and foe are ready, to extend to him, that well earned praise and commendation, that has been his by deeds.

John Alexander Macdonald was the second son of Hugh Macdonald, a Highland Scotsman, a native of Sutherlandshire and his wife Helen Shaw, of Badenock, Invernesshire, who removed to Glasgow in early life, where their son, the future Canadian Prime Minister, was born, on 11th Jan., 1815.

In 1820 the father removed to Canada and settled at Kingston, Ontario. In four years he left Kingston for Adolphustown, on the Bay of Quinte, where he leased a saw and grist mill a short distance from the settlement. The son John remained in Kingston attending the Grammar school. In 1836 the father returned to Kingston and engaged in business. When sixteen years of age John left school and entered the law office of Mr. George Mackenzie, and at 21 he was admitted to the bar and commenced the practice of law in Kingston.

In his young days he took a lively interest in politics, and at the general election of 1844 he offered himself as candidate for Kingston in the Conservative interests. The Limestone City was at that time the seat of government. He was elected over his opponent by a large majority, and continued to represent that place for 34 years afterwards and then, after an interval of eight years, for five years more.

We shall make no attempt to trace the career of this foremost parliamentarian through these many years extending almost to half a century. With them is written the history of Canada, and the general facts are known to Canadians young and old. He scored many wonderful successes, he had his reverses. He died, as he had desired, practically in harness and as head of the government whose destinies he had controlled and shaped during a period of years granted to few men.

Of his strong social nature every one knows an element that stood him in great stead in many a tight corner. In his domestic relations he was singularly happy, and time will never tell how much of his political success and to what extent his years of life and powers of mental and physical endurance were due to the affectionate care and devotion of Lady Macdonald. He died in his 76th year, and was buried in his native city Kingston.

COMING CHANGES.

NOT the earth but a good sized piece, is asked for by the new Massey-Harris Co., (Ld.), whose application for letters patent of incorporation are published in a late number of the *Canada Gazette*. Hitherto these concerns have confined their efforts principally to the manufacture of agricultural implements of various kinds, and on probably a more extensive scale than by any other company in the Dominion. The new combination does not intend to confine its energies to any pent-up Utica. They ask leave to do all they have been doing and in addition to have powers to manufacture waggons, vehicles, household furniture, stoves and hardware goods; to deal in iron, steel, nickel, rope, cordage, twine, oakum, etc.; to carry on a printing, publishing and advertising business and to act as general traders, with power to amalgamate or absorb other enterprises.

The request ends here, so far as details are concerned, though the application in some particulars, for example, "to act as general traders," is broad enough to admit of almost any class of mercantile transactions. In last month's MILLER we expressed ourselves somewhat fully on the question of combines. We had not before us at that writing the particulars given above. These emphasize, in still stronger terms, the thought there expressed, that the whole tendency of modern trading is towards a consolidation of kindred interests in one greater interest. But the movement goes beyond this. It is suggestive of the question: should a manufacturer be a manufacturer only? Or why should a dry goods merchant sell silks and cottons and kindred goods and stop there? Why not extend the list to foot wear, groceries fancy goods, and if you like, butcher's meat?

Everyone is aware that trading to-day is taking this shape. We have dry good stores in this city that sell almost everything else that comes under the head of store keeping. The bazaar store, which is the general term for these places of trading, is a factor in all our



THE LATE RT. HON. SIR JOHN A. MACDONALD.

cities, and their influence is seriously felt by the business men in the outside communities. The cheap fares that are ever and anon offered by our railway companies, combined with the perfectness of our postal and express systems, practically bring the trading advantages of the larger town to the shopper, even in the remote sections of the country.

Now we have a great manufacturing concern going into store-keeping, at least asking the privilege to do so, and the concluding prayer of the petition that they shall have power "to amalgamate and absorb other enterprises" is most suggestive. Are we approaching the age of Bellamy or are we getting away from it? We are undoubtedly on the eve of important changes, both in the commercial and social world. The closing days of the nineteenth century are freighted with many wonderful thoughts and movements bearing in this direction.

This article is simply suggestive. What thought have you on the question dear reader? We shall be glad to hear from you.—*Canadian Miller*.

USEFUL INFORMATION

There is a natural law relating to belting which is not generally known, but which is nevertheless of value in practice. The hug or adhesion of a belt is as the square of the number of degrees which it covers on the pulley. For example, a belt that covers two-thirds of the circumference of a pulley requires four times the power to make it slip as it does when it covers only one-third of the same pulley.

Take one ounce of camphor, dissolve it in one pound of metal lard; remove the scum and mix as much fine black lead as will give it iron color. Clean the machinery and smear it with this mixture. After twenty-four hours, rub clean with soft linen cloth. It is stated that this mixture will keep machinery clean for months under ordinary circumstances.

The soaps used for cleaning metal work usually consist of mixtures of vasaline, oleic acid and fat, mixed with a small quantity of rouge. When freshly prepared they leave nothing to be desired, but, unfortunately, such mixtures soon turn rancid, and become unfit for use. A new soap for metal work, which is stated to be free from this objection, is made from coconut butter in the following way: 25 kilograms of the butter are melted in an iron vessel, together with a little water, and to the mixture is added, with constant stirring, 180 grammes of chalk, 87.5 grammes of alum, 87.5 grammes of cream of tartar, and 87.5 grammes of white lead. This mixture is then poured into moulds and allowed to solidify. The soap so obtained is made into a paste with water and rubbed over the metal to be cleaned, and finally removed by a dry rag or chamois leather.

Sawdust seems coming to the front most wonderfully in various ways. A French writer recommends the use of sawdust in place of the hair usually mixed in mortar. He made a composition of two parts sawdust, two parts lime, five of sand and one of cement, which he alleges is very firm and will not peel off. The Technical Royal School at Charlottenburg has been making a series of experiments with sawdust, and has now proved that it can be used as building material. The sawdust is mixed with certain refuse mineral products, and compressed with a pressure of 1,500,000 kilograms to the quadrameter into the form of bricks. After this treatment the sawdust forms excellent building material, very light, impervious to wet and utterly uninflamable. A slab of this substance was placed for five hours in a coal fire and came out of the test intact.

Oak timber loses about one-fifth of its weight in ordinary seasoning, and, about one third of its weight in becoming perfectly dry.

It is found that by placing layers of hair felt under the foundations of steam engines and dynamos, noise and vibrations are materially deadened.

The use of rope transmission, says an exchange, is becoming more common every day and will continue so, but at such a continually increased rate that it is advisable for all engineers to become as thoroughly familiar with the use and care of ropes as they are now with belts. When a belt breaks or requires taking up, the job is usually performed by a simple process of lacing or connecting with some kind of belt hook made especially for the purpose, but where ropes are used, there is no patent fastener yet on the market by which the job of connecting them can be simplified. The task of splicing a rope is not more difficult than that of lacing a belt.

The old story for want of the nail the shoe was lost, for want of the shoe the horse was lost, is paralleled in the case of the oil cup, says Robert Grimshaw. A poor cup can do much to ruin an engine or machine; a good one, much towards bringing it up to the highest standard of duty. In this matter do not try experiments rashly. You may try one cup against another, in some place where heating will not do serious damage; but don't fit out all the way through with any untried cup, no matter what is promised for it. If the new cup is better than the old one, it may pay you to take off the old ones and put on new ones. If it is not better, there will be no advantage to you to try the new ones. It never pays to take a risk, however slight, unless you are paid to take it.