

MANY of our readers have asked for a description of wood pulp making by the sulphite process. The wood is peeled, all decayed or off colored portions removed, and is then cut across the grain into thin strips. It is now ready for treating, and is placed in cylinders, or drums, capable of resisting a pressure of from 100 to 200 pounds to the square inch, and is covered with sulphuric and other acids in solution. The tissue cotton like product is then pressed dry, mashed, mixed with water, rolled flat and cut for handling. It goes to the paper mill containing 60 per cent moisture and 40 per cent fibre. A cord of spruce yields 1,200 lbs. of graded fibre, worth from \$1.00 to \$1.50 a hundred pounds, and the plant to manipulate 8 to 15 cords in 24 hours is worth from \$6,000 to \$10,000.

SIX of the forest rangers, under the supervision of Mr. J. B. Charleson who was appointed as chief in 1887, reported to that gentleman last month their statements of accounts between lumbermen and the Quebec Government. Prior to Mr. Charleson's appointment a tax of 22 cents per log measuring 17 inches and over, and 11 cents on all under, was imposed. The abuse made of certain privileges; the evasion of the rules or laws on measurement; and the inadequate staff of rangers, led to some radical changes. More rangers were appointed, their work was increased and they were empowered to obtain a sworn statement from lumbermen, his agent or culler, and instructed to measure logs themselves as often as possible. The stumpage charge of 11 and 22 cents was abolished, and in lieu thereof \$1.30 is exacted for every 1,000 feet of timber, board measure. The cut of 1888-89 under this system netted to the crown lands department of Quebec \$1,200,000. Under the abolished system a greater cut of logs yielded \$864,000, or a difference of \$400,000.

FOR the last three years attempts have been made by the Norman, Keewatin and Rat Portage mills to form an association, fix prices of lumber, and hold to the agreement. There was formed over two years ago the North-Western Ontario and Manitoba Lumber Association, with rules of government and fixed prices, but some of the members departed from the spirit and tenor of the regulations rendering the scheme abortive. The managers of the various mills have been discussing the situation lately and have devised a plan which will be submitted to all the original millmen in the North Western and Manitoba Lumber Association. Messrs. R. A. Mather, D. C. Cameron and J. M. Cameron, of Rat Portage, are the delegates who will confer with Messrs. Jno. Mather and W. R. Fuller, of the Keewatin Lumber Co., and Mr. J. F. McCrea, of the Western Lumber Co. If the scheme is adopted, the new arrangement provides for the retention of the mills by the owners, but the products must be pooled. A central office will be opened to manipulate the output and the profits and losses will be settled on the basis of business done by each mill in the past.

AN Ottawa paper before the election which continued Sir John Macdonald in power as premier of Canada, a position which he has occupied since 1878, said in favor of unrestricted reciprocity "that it would bring back the box shuck factories which formerly employed hundreds of men, but had been compelled to move across the line, while it would also make Ottawa the great distributing point for the New England States, as all the lumber would be dressed there before shipment." According to this, Americans have cause to rejoice over the success of the conservatives.—*North-western Lumberman*.

The statements of hundreds of Canadian papers made during the late election, if published in pamphlet form, would exhaust in one issue the stock of quiet sarcasm our United States contemporary keeps in the sanctum. If some of them during a contest would say less about supposed results and give the means of putting their theories into practical usage the electors would thank them for being public benefactors. Our Ottawa contemporary has some extra pull on the Washington Senate, that the Canadian Legislature cannot be cognizant of, or else a seat in the house, say along side the Mace might be given it without the worry and expense of going to the polls. It will now be in order for the editor at the capital to open his bag of tricks.

IT is agreed amongst men of experience that hardwood logs which float a long distance in water and remain months immersed in it give better sawn results than dry land stock. It is claimed, apart from any other qualifications, soaked logs produce lumber that does not check or split so readily as the dry land article. One of the most difficult hardwoods to market in good shape after leaving the saw is the oak family. Many a promising yard full of green lumber has turned out the opposite of expectations, and the further splitting and checking when in the hands of the mill to cut and split up, has always been a source of loss and annoyance. From the day the plank or deal leaves the saw the trouble begins. Oak is a slow natural dryer. Stocked in a mill yard to dry it warps, twists, splits and checks, and when finally drawn from a dry kiln the resemblance to the original for soundness is wanting. Since oak became so popular for cabinet work and furniture a great deal of attention has been paid to handling it, and it is claimed that a kiln that steams the wood by strong currents and rapid condensation of moisture is much better treatment than the hot air process. It is argued that the reason why it checks and splits is because the outside becomes dry and case hardened, while the inside is green. Before the moisture escapes from the interior it forces the grain apart and causes the defects.

IT has become an accepted theory amongst the scientific world that geologically Australia is many centuries behind the rest of our planet. Her peculiar marine inhabitants, land animals, feathered tribes and her aborigines are the basis of the arguments, as well as the productions of the forest. They are almost as strange as the marsupials, and their description as given by Mr. J. Ednie Brown, of the forest department of Sydney, is decidedly interesting. Silky oak, a soft variety, grows to the height of 75 feet and is used for furniture. Forest Oak and Beefwood, so called from the streaks of color similar to the fat and lean of beef, are both classed in the old world's oak family from a supposed resemblance only. But it is not in the oak family alone that misnomers occur. So many odd specimens were found by the early settlers that names had to be invented to distinguish them, and the barkless peculiar fibred trees were christened as near as possible to counterparts in the old world or after some substance which they resembled, hence there are found satinwoods, blackwood, whitewoods, rosewoods, sandalwoods, marblewoods and the ash family, the latter looking very unlike the American specimen. Trees being found in great variety outlandish nomenclature had to be resorted to, and dogwood, stavewood, pigeonberry, union nut, myall and myrtle are in the forest vocabulary. Discrepancies occur in the nomenclature of the American continent woods. The Douglas fir is a spruce. Oak of commerce is divided in two classes, red and white, but there are thirty-seven varieties found. The true poplar is a willow. The gum tree of the Southern States is a hazel. Red cedar and our white cedar are not of the pine family; the former is a juniper and the latter a cypress. The yellow poplar of commerce imported into Canada under the name of whitewood is a tulip and the only one of its variety in America.

THE *Free Grant Gazette*, published at Bracebridge, directs the attention of its readers to offers made from United States firms for Black Ash, Basswood and Pine shingles, and cites amongst them a letter from G. Elias & Bro., of Buffalo, to Mr. A. Boyd, of Monck, as a sample case. The Buffalo firm offer \$22.00 for ash, and \$17.00 for basswood. The wood to be well manufactured and first class in every respect. The *Gazette* comments on the letter thus:

The prices offered above are about double as high as the Toronto dealers offered, and yet the duty is too high to admit of Mr. Boyd doing a profitable trade with the American dealers. But give us reciprocity, and then Mr. Boyd will make a pot of money in the timber trade with the Americans. So may other mill owners, who have the timber to cut, and farmers who have the hemlock, ash, birch and other timber to sell.

Waiving the hack cry "give us reciprocity," with out attempting to show us how to get it, we reply to the comparison drawn between Toronto and Buffalo prices

that the statement is not correct. Let us take the case of the quotation, F. O. B. at Buffalo \$22.00. Freight from Huntsville to Buffalo \$4.00, duty \$2.00, inspection and incidentals \$1.00, total \$7.00—balance \$15.00. Toronto price \$13.50 to \$15.00. On same grading and gird culling as Buffalo insists upon, any Toronto dealer will give \$15.00 F. O. B. at the mill. Take the other case F. O. B. at the mill \$22.00. Duty \$2.00, freight \$4.00, inspection and incidentals, \$1.00—total \$29.00. The maximum price for picked in Buffalo is \$25.00 and grades sell as low as \$13.50. No one would ship at a loss of \$4.00 per M, not even our friend Elijah of the *Gazette*. These are hard cold figures to digest after publishing such siren and delusive clap trap as that contained in our clipping, but before an election a certain amount of license is allowed to party journals.

THE proverbial reputation of Scotchmen to get value for their money is not lessening; in fact the requirements contained in the specifications for the oak tender which we reproduce puts the desire beyond a proverb and stamps this particular Sawmie as a Scotchman amongst Scotchmen. In the Glasgow market recently there were tenders called for oak scantling, some 45,400 pieces, running from 6 ft. 6 in. to 18 ft. 6 in. in length; from 2 1/4 to 7 1/4 inches thick; and from 4 1/4 to 13 1/4 inches wide. Will our lumbermen read what is said regarding quality, then sit down quietly and ask themselves if in Canada with all her boasted forests could a mill be found that could fill the bill.

"The timber must be of the very best quality, thoroughly seasoned and free from rot; shakes, hearts, sapwood, wormholes, soft knots, large knots and all defects. The number of pieces required of each size is in the proportion shown in the list, and each piece must be sawn and cross cut exactly to the specified dimensions. Delivery is required in equal weekly quantities, beginning first week of April, 1891, and the whole must be delivered by the 30th of September. Each delivery must include a proportion of all the specified sizes in the list. No portion of the timber will be accepted as delivered to the company until it has been examined and approved by the company's inspector and found to be in all respects strictly in accordance with the specification and scantling. Should any portion of the timber which may be ordered not fulfill the conditions of contract, the company reserves the power to reject the whole, or any portion thereof. Please state in cubic feet the total which you undertake to supply, and quote net price per cubic foot, delivered free in wagons at this company's works."

AT one time salt sea salmon swarmed in the rivers flowing into Lake Ontario. Many old settlers have caught them in the Humber, the Trent, the Moira, other smaller streams and in those tributary to the St. Lawrence. The erection of mill dams had considerable to do with stopping migratory fish, but the Dominion Minister of marine and fisheries blames the pollution of the streams from sawdust, mill rubbish and the refuse of factories for the destruction of fish life, the lower orders of life on which they exist and vegetation of every kind. He deplores the practice as a serious evil and confesses the difficulty in correcting it owing to the interference with a national industry. Speaking of the annual report a prominent mill man says: "Were it not for the serious impediments caused to navigation, and the probable sanitary evils that exist from the lodgment of sawdust in spots where the current cannot effect it, fish, like the buffalo, should go. You might as well expect to give up the mill and mill dam because the government devise schemes for the restoration of the Indian or the beaver." There is a grain of truth in the millman's contentions and a degree of comparison in his contrast. But much forbearance, if not long-suffering, has been exercised towards mill owners on the question of the disposal of waste, and the government can only describe the course that has been adopted as owing to the well known benefits of manufacturing interests. Enquiry on the probable cost of water power mills, and the destruction or utilization of waste, shows that it takes a small percentage of profits to provide against injurious effects.

THE official announcement of the opening of the Dominion Parliament for April 29th is made in an extra of the *Canada Gazette* dated the 17th March.