THE CANADA LUMBERMAN

VOLUME XIII. NUMBER 8. | TORONTO, ONT., AUGUST, 1892 | TERMS, $1.00 PER YEAR SINGLE COPIES, 10 CENTS

BY THE WAY.

ABOUT a fortnight ago Graham, Horne & Co., of Port Arthur, received a large raft of logs which had been towed across Lake Superior from Wisconsin to be manufactured into lumber in Canadian mills. So it is a poor rule that will not work both ways. The Americans are taking our logs. If we are so disposed what is to prevent Canadians from taking their logs? Sauce for the goose is sauce for the gander. The towing, we are told, was accomplished with complete success.

× × × ×

What to some people may be an extraordinary occurrence may be to others a matter of no particular remark. Peculiar phenomena will mark certain localities, but to the residents of these localities they possess nothing peculiar, because common to the locality. A stranger in that locality would find these a feature of wonderment. It is here that one of the delights of travel asserts itself. The London Timber Trades Journal prints a photographic view of a log jam, or "salom," as it is called, that occurred at Riga, in the Baltic provinces of Russia, and gives a lengthy account of the disaster. A "salom" is not an unknown difficulty of lumbering in the Baltic, but it is unusual evidently to witness anything as large as that described by our English contemporary. In this newer world a log jam is a frequent occurrence, and the size of some of them is not to be measured by that on the Riga.

× × × ×

Not less than one hundred men and boys make a living picking up and selling pieces of wood that fall from the mills into the Ottawa river, and 150 others, who work between times and after regular working and school hours, find occupation and some remuneration in the same business. Up and down the river these fishers of wood may be seen at all hours, early and late more particularly, in their flat-bottomed bonnes, some with pike pole and others with nature's own grappling rod, the arm and hand, dragging in their product. The wood is piled on the shore to dry and afterwards hawked around the streets for sale. Those who can afford it hold their supplies for the winter when a better price is secured. Some hold their draggings for home consumption, filling in a useful niche when the cold sweeps down the Ottawa and money and work is less plentiful than in the summer. The quantity of driftwood, as it is termed, gathered in a summer in this way runs up into many thousands of loads. Were it not that the river is relieved of this refuse the wood would sink in time and fill the river bottom or block the bays. And so it is that very little of anything counts for waste in this day.

× × × ×

In a sketchy compliment paid by one newspaper man to another—and strange to say they are rival journalists catering to the same field—there is found these words: "Haven't you noticed that there are men who always have an eye on boys who show signs of promise, which means gentlemanly boys, who try to do their best every time? Well, there are, and boys would be surprised if they knew how they were being watched by men who were on the lookout for brainy, reliable help, and some of them if they knew anything would behave themselves better than they do." Walking along the streets of any of our towns or cities, small or large, the observing man must be impressed with the thought that either there are many boys who do not know they are "being watched by men on the look-out for brainy, reliable help," or, if knowing this, they must hold strange ideas of what goes to decide an employer of labor in selecting his help. There goes a boy on a message for his employer; what is he doing? He has lost fifteen minutes of his master's time betwixt staring in a shop window and chattering with an idle companion. There is a young man out on a business commission and with a friend he steps into a corner saloon, and the moisture on his upper lip is the tell-tale of his business in that place. Another indoors gives no thoughtful care to the work in his hand. His heart is not in his work. What employer wants anything to do with any of these boys? These are not the boys, who like the one of whom we have been reading, has forged his way from common school to high school, and the rudimentary positions of a newspaper office to one calling for enlarged abilities and greater responsibilities. The LUMBERMAN touches on these matters because it has an interest in the younger generation of lumbermen, as well as those who have climbed successfully over the difficulties of earlier years. We have a strong attachment for the boys, and we want to see them start right.

× × × ×

In some measure at least chaos will exist in a district where the conditions of society are still embryotic. We see this in the municipal management of our newer towns. Those charged with the responsibility of controlling affairs are timorous of moving too rapidly, and public works are entered upon as though those concerned were building only for a day. Even so modern and progressive a city as Toronto is not a poor example of this kind. How much of our public works has been of a character that has called for constant tearing down and rebuilding. The younger business men, and some of the older ones, pursue similar methods. They do not recognize the possibilities ahead, and hesitate to go too fast. It is the conservatism of human nature asserting itself, an excellent characteristic, though doubtless exercised with too great vigor sometimes. The lumbermen of the Southern States are having an experience somewhat on these lines. They have realized of late years the large timber wealth of which they are possessors, but by its very abundance they are dazed. There is no such a thing as business organization among them, and as has been indicated by recent interviews in these columns, in their anxiety to place their product on the market, they have had no regard for one another's interests, or, indeed, their own.

× × × ×

Few studies in life are more interesting than those which illustrate the various methods employed by man to obtain a livelihood. The pressure of living in this age is so great that it tests the wit of the most ingenious and gives rise to many novel occupations. In another paragraph we have told of the driftwood gatherers of the Ottawa river. A step or more higher up in the mercantile ladder are the "millwood" dealers of the Ottawa, who contract with the millowners to remove daily from the mills at the Chaudiere the refuse wood that gathers from the saws. This wood consists largely of blocks and four-foot edgings, which drop from the saw into a place known as the "box." For the proper running of the mill this "box" must be kept clear, and this is a stipulation of the contract. The men engaged in the business need to possess sufficient capital to supply themselves with horse and rig, and must employ more or less help to carry on the work. About 100 loads of blocks and 200 cords of edgings are taken daily from the mills. This business has not assumed its present proportions at a jump. There was a time it is said in the early history of lumbering in Ottawa when millmen not only gave the refuse wood away to have it removed, but paid some one to have it done. Population has increased and with it the demand for wood. It is estimated that 35,000 loads of millwood a year are now taken from the mills. One mill alone, it is said, makes $1,000 a month out of its refuse wood, or about $6,000 a year. As a study in economics these facts are not unsuggestive.

THE POWER OF WATER.

THERE are very many, generally unknown, peculiarities about water as a power-making agency, even to a great many mechanics that are quite efficient in practical hydraulic engineering. The spouting velocity of water is controlled by the same law as falling bodies. As an instance the spouting velocity of water under a 16-foot head is the same as that of a body falling 16-foot, that is, the velocity of the falling body at the end of the 16-foot fall is the same as the mutal velocity of the spouting water from under a 16-foot head, both being 32.4 feet per second.

The velocity from under a 64-foot head is 64.8 feet. It strikes the careless thinker as being quite strange that water should have a spouting velocity of 32.4 feet from under a 16-foot head, and why 64.8 feet from under a 64-foot head, and each are apt to jump at the conclusion that as the head increases in height it loses relatively in power. That, however, is very far from being true. A 20-inch water wheel will yield eight times as much power under a 64-foot head as it would under a 16-foot head, but would, of course, use twice as much water. The power developed being always directly as the quantity of water used and the height of the head.

The square root of the multiple of increased height is the multiple of the increased spouting velocity. Thus, as we have seen, the head has been increased from 16 to 64 feet or 4 times, while the spouting velocity was increased 2 times only, 2 being the square root of 4.

The spouting velocities of streams of water issuing from under various heads is as the square roots of the heads; or, in other and plainer terms, velocities increase in exactly the same ratio that the square roots of the heads increase; and a convenient way to ascertain the spouting velocity of any given head is to take the square root of it and multiply it by the constant factor 8.1. As an example we will take a head of 16 feet, the square root of which is 4, which multiplied by 8.1 equals 32.4 feet the velocity of a 16-foot head. Again we have a head of 64 feet, the square root of which is 8, which, multiplied by the constant 8.1, equals 64.8 feet per second, the spouting velocity of a 64-foot head.

Now, if we take a 4-foot head as a basis and call its useful effect one, we are able to construct a simple formula for ascertaining the relative useful effect of any other head. First obtain the spouting velocity of the head as above explained, and divide it by 16-2 which is the spouting velocity of a 4-foot head; then divide the height of the head in feet by four and multiply the two together and the product will be the efficiency as compared with a 4-foot head. As an example take a 16-foot head, the spouting velocity of which is 32.4 feet, which divided by 16.2 equals 2; and 16 divided by 4 equals 4, which multiplied by 2 equals 8. Therefore, the efficiency of the 16 foot head is 8 as compared with one for the 4-foot head. Or again, take a 64-foot head, the spouting velocity of which is 64.8, divided by 19.2 equals 4, and 4 divided into 64 equals 16, which multiplied by 4 equals 64, the efficiency of the 64-foot head being that many times greater than the 4-foot head. It must be understood that the vents are the same in size in their calculations. As the size of the openings are decreased or increased the effectiveness is decreased or increased in proportion. The result of these calculations are only relative to get at actual results. In any case we must know the actual quantity of water that can be used.

DECLINE IN SHIPMENTS.

LUMBER shipments from the Saginaw river by lake had amounted up to July 1 to 129,673,000 ft. Last year at the same date the shipments had reached 138,186,000, and in 1882, when the business reached the maximum, it had amounted to 284,794,922 ft. The decline is due to the decline of the business.