We have not yet sawn any for export, but expect to

LOSS FROM CARELESS HANDLING AND PILING OF LUMBER.

BY H. B. WETZELL.

DERHAPS there is no leakage in the profits of the manufacturer or consumer of lumber so little noticed, as that which results from the careless piling and handling of lumber. This leakage is a silent and insidious enemy. Unless one be constantly on the guard, it finds its way into various places about the mill and yard where it can do damage. Only the most vigilant eye, the most watchful care, will keep it away. Most of its effective work is about the premises of the man of careless habits. The methodical, systematic and thorough business man will not harbor this enemy on his premises.

There are some men who seem to be naturally neat, precise, careful and methodical in their business affairs and daily life. Others are the opposite. The freedom of outdoor life and the nature of the business of the lumberman, tends to break down and keep away rigid rules and observances such as characterize other kinds of business. The average lumberman is free, openhearted, and does not cultivate nor realize the value of small things. Herein lies the danger of waste in his business—the enemy that is insidiously sipping away at his profits.

When one goes into a lumber yard and sees every pile of lumber put up as if following out geometrical rules, one may be safe in assuming that the owner is in a prosperous condition, or travelling in the right road to reach it. He has certain rules which must be observed, and which usually show that the details have been looked into. There may possibly be such a thing as being too exacting, too precise, spending too much time for appearance sake, but as a rule it doesn't take any longer to pile lumber well than to pile it badly.

On the other hand if one will go into a lumber yard about a saw mill, planing mill, wholesale or retail yard, or any establishment where lumber is worked up, and sees lumber lying carelessly around, a board or plank here and there out of place, some split, others warped and twisted, others badly weather-stained, it is sufficient evidence that the owner is careless and is not making as much money as he should.

Wide lumber, especially thin stuff, requires careful handling to avoid splitting. Take an inch board 12 ft. long, 18 inches wide; it contains 18 ft. of lumber, board measure. If it be of a grade worth \$30 per thousani, the piece is worth 54 cents. By careless handling it may be split, either at one or both ends. That will reduce its grade and shipping value at least \$10 per thousand, or one-third its value. Here is a loss of 18 cents on that one piece. If a piece be split off diagonally on one end or side, causing a loss of say three feet or one-sixth, the grade will be reduced at least one-half in value. Then there would be but 15 ft. to sell, or use, and it would bring 221/2 cents, or a loss of 63 per cent. Now if this kind of work stopped at this one piece, the loss would not be great, but the probabilities are that there will be many such pieces during the course of one day only, more than enough lost to have paid the wages of several workmen who handled the lumber.

In going into a lumber yard, nothing looks more unattractive than to see a board here, a plank there, out of place, thrown about like piles of rubbish, wagons of carts, or cars running over them; some split, others warped and twisted, some damaged from sun, rain, or other causes: in fact a loss of several per cent. of leakage, which might have been a profit in the business if properly managed.

LUMBERING IN BRITISH COLUMBIA.

AN OTTAWA gentleman who has been inspecting the lumber resources of British Columbia writes to a friend in Ontario as follows, regarding the products of the forest of his adopted home: "Fir is the staple wood of the country, next comes cedar, then spruce, alder, soft maple, cotton, yew, etc. Our market for fir is China, Japan, east and west coast of South America, India, South Africa, but principally Australia, and a few cargoes to the Sandwich Islands. The latter country has a treaty with the United States which admits American woods free, while others have a duty.

saw a few cargoes during the summer. So far the local and northwest markets have kept us going, but we will have to look for a foreign outlet for part of our production owing to the increased capacity of our new mill. Last season we cut with the old mill 3,000,000 feet and 6,000,000 with the new. I think we will cut about 20,000,000 this season. The mills here usually cut about eleven months in the year. We have a sash and door factory in connection with our mill and will likely make 100,000 salmon cases this season. Milling is quite different here from Ottawa. There the average of the logs is 100 feet, while here it is 1,200 feet, and I assure you, it requires strong machinery to break up these big logs. The largest log we have cut since I came here was 72 inches in diameter, and the longest 85 feet. The largest log that ever came to our mill was 54 inches in diameter and 115 feet long, this was perfectly straight and without a knot or blemish for 100 feet up, in fact there was only one green limb on the log, and strange as it may seem, was put into the water by two men. The largest logs are put in by hand loggers, two of whom make a camp. They cut trees where the ground slants to the water and by batking them and raising them with jack screws, get them started and they roll into the water, nothing will stop them when once they start. The quantity and size of cedar is surprising, and all sash and doors are made from that wood. The doors are all free from knots and blemishes. Our shingles which are cedar are the same. We make only first quality, and they are first quality running up to 14 inches wide, or as large as the machine will cut. Labor is high. Ordinary labor is \$1.50 to \$2.00 per day, and skilled \$2.50 to \$3.50, and we pay our head sawyer \$4.00, the man that runs our gang\$3.50, our edger man \$2.50, filers get \$3.00 to \$4.00 and ten hours is a day. The fishing on the river, or rather salmon canning, is a large industry, and the Indians who do most of the fishing spend all their money here. About all the farming land on the coast is on the Fraser, the quantity is limited, and good lands bring \$50,000 to \$200,000 per acre, according to quality and location, \$100,000 being paid for farming lands partly improved. Four tons of hay and 100 bushels of oats per acre is not considered a remarkable crop here, it is the producing qualities of the land that give it value as well as the scarcity on the lower Fraser. There is good land at Kamloops, Shuswap, the Okanorgen Valley, etc., etc., but those places are only accessible by railway, and of course the railway gets most of the profits. The bunch grass of British Columbia is said to produce the sweetest beef in the world. It is usually about the same price as in Ottawa, and of excellent quality. Our flour mostly comes from the northwest and Manitoba. Every person in this country has money, and is not afraid to spend it. We have no beggars and no poor. Our store did a business of \$35,000 last year, and our mill, shingle mill and factory about \$165,000, and \$100 covered our losses by bad and doubtful debts."

COLLINS AND THE BEAR.

PATRICK COLLINS is the foreman of a wood-cutting camp on the Scott Road, B. C., and though he has had some experience in the management and culture of domestic animals, never until a few days since did he feel competent to shoulder the responsibility of running a menagerie and keeping the wild beasts in hand simply by the use of soft and persuasive language. He had strolled into the bush by himself to meditate and pick out a nice clump of timber for the woodman's axe. A huge fallen tree obstructed his path, and, as he climbed up at one end of it, a gigantic bear, weighing at least 1,000 lbs., made its appearance at the other, Both came to an upright position at the same time; Collins stood perfectly still, and the bear advanced three paces and stopped. The man and the bear eyed each other rather suspiciously for a few moments; what bruin's thoughts were will never be learned, but Collins says he had never been so terribly affected since the last illness of his mother-in-law, when it was very doubtful whether she would pull through. Coming to the conclusion that something must be done, Collins made up his mind to trust to a little Irish blarney, and

the following chaff is reported by Mr. Collins himself. "Shure now, its a fome log we're on, an' there's enough for ourselves and siveral more. Its pleasant walking in the woods on Sunday, especially whin we mate in this agreeable way; quite friendly isn't it?" The bear gave a grunt and moved forward a pace as if to embrace Pat and prove his friendship, at least. "Hould on now, hould on," said Collins, "much as I admire ye. its better to kape our distance till we've come to an understanding. Sure you're a fome agreeable looking craythure, and if you'll say 'peace,' begob I'll ratify the bargain and lave you alone, but if you say 'war,' why I'll climb a spalpeen of a tree and shout till Bill comes wid his gun and kills ye. D'ye moind that now, ye divil?" The bear took a look to the right and left as if expecting the formidable Bill and his gun to break in on the conversation at any moment; and sure enough William's melodious voice was heard, about half a mile away, chanting a ditty about "The woodchuck climbed the big hemlock tree." "Now thin, listen to that will ye," said Collins, "and whisper, acushla, lave the log instantly, for if Bill gets sight of ye, ye're hide wouldn't hould enough fur to kape ye're skin from the musquetes." Whether it was this dire prediction, or the remembrance of business matters elsewhere, can only be conjectured, but in an instant bruin turned, shot off the log and sailed away through the bush as if a hundred fiends were after him. Collins also turned and made as rapid progress in the opposite direction, nor did he stop until he was safe under the protection of William's deadshot gun.

TO SAW TOUGH TIMBER.

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 uniform size. Let the sawing be done by working from one side of the log to the other, and he 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 that there will be just so many cuts-no more, no less, allowing for the kerf of every cut. If the log is to be cut into three-inch scantling, for example, saw a three-inch plank from each side until there is a piece six and a quarter inches thick left in the middle. The kerf of the saw will remove about one-fourth of an inch. When a timber-log is sawed in this way, the cuts will be of uniform thickness from end to end. Now turn the log down and saw the cuts the other way in the same manner, and the scantling will not only be straight, but of a uniform size from one end to the other, if the saw be started correctly.

A RAILROAD ON TREE TOPS.

T may not be known outside of the neighborhood in which it is situated, but it is nevertheless a fact that in Sonoma county, Cal., there exists an original and successful piece of railroad engineering and building that is not to be found in the books.' In the upper part of the county named, near the coast, may be seen an actual railroad bed on the tree tops. Between the Clipper Mills and Stuart Point, where the road crosses a deep ratine, the trees are sawed off on a level with the surrounding hills, and the timbers and ties laid on the stumps. In the centre of the ravine mentioned two huge red wood trees, standing side by side form a substantial support. These giants have been lopped off seventy-five feet above the bed of the creek. This natural bridge is considered one of the wonders of the Golden State and for safety and security far exceeds a bridge framed in the most scientific manner.

It is somewhat singular that lumbermen and loggers never talk about forests. Plain woods is enough for them.