THE CANADA LUMBERMAN.

VOLUME XII | NUMBER 8

TORONTO, ONT., AUGUST, 1891.

TERMS, \$1.00 FER YEAR.
SINGLE COPIES, 10 CENTS

FOREST FIRES.

A CAMPER'S fitful fire burns low, Then starts afresh with lurid glow. Unwatched, unchained, with fuel nigh.
The flames grow wide, and broad and high!
With rush and roar, and swoop and crash,
O'er field and forest, fires now dash. They're here and there, and everywhere.
The sky grows thick with pall and glare.
The tall trees fall, and house and field To all-consuming fiends must yield.
The men like demons fight the blaze—
Back-fire and chop—and structures raze.
Repulsed somewhat, but reinforced, From ruthless ruin, death, despair—
On wings of red they ride the air.
Through choppings dry, o'er town and lea, There surge the waves of a burning sea. Will they never cease to onward sweep?— The heavens now in sorrow weep! First gentle rain—then torrents fall,
To drench the wood, the field and all. The firey march at last is staid-The boon for which men hoped and prayed. But, count the lost and find the dead— Gaze on the ruin 'round us spread; Then on the camper's work reflect—
The careless one who nothing recked; The man who thoughtless left the fire That grew and spread destruction dire, One heedless act to forethought turned, And never a forest fire had burned

BACKWOODS LUMBERING IN FLORIDA.

BY JAMES F. HOBART.

THERE are many fine mills in Florida, but these are to be found near seaports, or other good shipping facilities, and cut lumber chiefly for Northern shipment, leaving local demands to be supplied with lumber by innumerable light saw-mills which are scattered everywhere through the state.

Along the line of the Florida Southern Railway are scores of these mills, and a description of one will answer for nearly all of them. A very few of these mills rival in construction and appearance the larger concerns, but as a rule they are thrown together in a very rough manner, and operated equally as rude.

These little mills are built with an aim to get out as great an amount of lumber with as little first cost or running expense as possible. Ample power is at hand in these mills, and they are never troubled by boiler inspectors. In fact, a boiler is never inspected here until after it has blown up.

One mill is bu'lt near the North branch of the Florida Southern Railway. It is but four years old, but from its weather-beaten appearance would easily pass for one hundred and four.

The first noticeable feature is the log truck, with its big wheels, eight feet in diameter, and tires six inches wide, which are not welded, but are lapped two or three feet and then rivited. A pole sixteen feet long admits of carrying a forty foot log, without its interfering with the mules.

At the extreme front end of this long pole is the "drag wheel," a unique apparatus, which skates over the sand and to a measure guides the long pole. The drag wheel also serves to prevent excessive sidewise jerks of the pole, and saves the mules from unnecessary labor.

A windlass is mounted on the axle of the wheels, and is worked by means of a long lever and rope. The 'log dog' is dropped over a log which it firmly grasps upon the ice tongs exinciple, then both log and dog are raised by the lever and windlass, and are ready for the journey.

Into the forest for miles these log trucks penetrate, going further and further as the choice logs get scarce, forming a picturesque sight, and each double span of mules, with its mounted driver, pace sedately along the sandy trail.

"All teams off to the forest," says the foreman, as the teams all unload before the mill, and away they go, a ponderous procession, to fetch the mighty yellow-pine

logs.
With a five pound axe, fixed to a long straight handle, the Florida woodsmen cut down the huge trees with a vigor and vim unknown to the Northern chopper. It is seldom that a crooked axe helve is seen here, and the crooked Canadian axe handle is unknown. It is a singular fact that the latitude in which an axe belongs can be almost invariably determined by the amount of curvature in the handle or helve.

There is a nice calculation needed by the Florida axeman to fell timber to an inch in any given direction to escape rocks, or to allow of easier loading. It is unnecessary here, and vigorous blows throw out huge chips until the tree falls in any direction it chooses upon the level sandy plain.

The interior of the Florida saw-mill plainly shows that tasty design has never even been thought of, and combines in a ludicrous manner ingenious makeshifts, and slovenly negligence. The shafting is very much too small for the work it is required to do, and it is not uncommon to see a one and one-half inch shaft driving a double surfacer with beader and matcher heads, the small shaft driving from a forty inch pulley and only running two hundred revolutions per minute.

A bar of railroad iron held the furnace front in place, and two three-fourth inch bolts prevented the whole boiler front from tumbling down. Semi-portable boilers of the locomotive type are in general use. They are run for all they are worth and last until they burst or burn out.

The circular saws in these mills are peculiar, they must be very strong, especially at the roots of the teeth in order to stand the strain of cutting the terrible hard knots which are constantly being met with in yellow pine. The hemlock and spruce knots bear no comparison with the yellow pine knots, and even a good axe will be spoiled unless great care is taken when cutting a knot.

As lumber falls from the saw, it is received by a line of dead rolls, and pushed under a swing saw, when it is cut to the desired lengths. Logs thirty to forty feet long are mostly cut, making two or three bounds from each length cut off by the saw.

A gang jointer stands near the swing saw, and upon it the boards can be cut the desired width of square edge lumber, and, at the same time, a picket cut from either side, should any part of the round edge board be of sufficient width to make it.

From the edges the boards naturally pass to the surfacer, and odd corners about the mill are occupied by a lath machine, shingle mill and a superannuated jig saw. Upon this machine, and held in place by wire, is a board bearing a notice which flavors decidedly of the true Florida "cracker."

The homely ingenuity displayed by the "repair men" of these mills is well worthy of study. The throttle valve got to leaking, the stuffing box bolt threads stripped, and in trying to remove the studs they broke short off, leaving a very bad leak of steam.

The valve stem was repacked very full, the gland put in place and held by two pine wedges driven in, one on each side of the valve stem.

A boiler tube got to leaking and was promptly suppressed by topping a thread in either end, then common pine plugs were screwed therein, stopping the leak with only the loss of the tube's heating surface.

The saw dust conveyors around these mills contain the very essence of mingled ingenuity and laziness. They are usually made out of a worn out rubber belt, or perhaps a new one of canvas, and run from a hopper beneath the saw to some place outside the mill, where, instead of running 100 feet further and delivering the waste upon a heap, the belt stops short and is supplemented by a negro and two wheelbarrows, one of which is filling while he empties its mate. The fireman also is kept busy by wheeling his dust and shavings entirely around one end of the mill, together with a dozen piles of lumber.

About once an hour the saw dust convey gets too slack to be driven by frictional contact with its drive pulleys. This is quickly cured, however, by two quarts of water, which is dashed upon the belt, forming an efficient but short-lived tightener.

The output of these mills is often used green, as it comes from the saw, but it often lies in shiftless piles exposed to sun, air and wind, until it is twisted out of half its resemblance to lumber. Florida lumbering has many "points well worth imitating, also many which should be improved."

TREE OIL AND TALLOW.

BRITISH Consul Hosie, in his report on the trade of Wenchow, China, for the year 1890, gives the following information relating to vegetable tallow and oil derived from the tallow tree, "Stillingia sebifera." which is largely cultivated near Wenchow, and still more widely within the Ch'u chou perfecture to the west: "It is not generally known that the fruit of this tree produces oil as well as tallow. The berries which resemble coffee beans in appearance and size, are first steamed and then pounded in an ordinary rice trough. By pounding, the soft mealy mesocarp is partially separated from the kernels. The mass is then placed in a bamboo sieve, the meshes of which are just large enough to allow the mealy matter to be scrubbed through, and small enough to keep back the kernels, which are hard, black and about the size of peas. From the mealy matter the tallow is expressed in primitive wooden presses. The oil is derived from the kernels in the following manner. They are dried and passed between two millstones held at such a distance apart by means of a bamboo pivot as to crush the hard shells of the kernels without injuring the white interiors. The mass is then passed through a winnower, which separates the broken shells from the solid matter. The latter is then placed in a deep iron pan and roasted until it begins to assume a brownish color. The crushed shells make an excellent fuel for the purpose. It is then ground by a huge steam roller in a circular stone well, steamed, made into circular cakes with bamboo and straw casings, and passed through the wooden press. A good lighting oil called'ch'ing yu,' of a brownishyellow color, is thus obtained. The tallow is 'p'i yu,' that is skin, or external oil."

WHERE THE LUMBER GOES.

HERE does all the lumber go that is cut each year? Hundreds of millions of feet go into the thousands of houses built each year in city, town and country The agricultural implement makers consume 100,000,000 feet yearly, mostly oak, ash, maple and hickory. The furniture manufacturers use 300,000,000 yearly, nearly all hardwood The waggon, carriage and buggy makers consume more than 100,000,000 feet annually. These are a few of the places where it goes.

A man's chances for life are good and his glory magnified when he enters the forlorn hope for a charge on the enemy's works. He has no chances for life, and is written down a fool, when he engages to set a screw on a revolving shaft.