

DESERONTO.

The output at the cedar mill during the month of October, says the *Tribune*, exceeded that of any previous month in its history, when we consider the stock used and amount of machinery in operation. The following is a list of different kinds of lumber manufactured during the month, and amounts of the same cut:—Railroad ties, 3,360 pieces, 8x10 in. post, 11,104; shingles, 2,231,250; heading, 66,000; cedar, 16 in., 16,200; joisting and dimension timber, 549,700 feet B. M.; 1½ lath 4,297,000 pieces; saw logs, 2,180 pieces; floats, 453; square timber, 329; paving blocks, 67 car loads; 18 in. wood, 907 car loads; 4 in. wood, 491 cords. Shipment from this department have been lively all season, particularly by rail during the construction of the N. T. & Q. Railway. A great number of car loads of ties, posts, telegraph poles, culvert and bridge timber, material for station, section and coal houses, were shipped from the mill, and this, with numerous orders from the Grand Trunk and other lines, made the past season more lively than ever heretofore. The convenience afforded by the Bay of Quinte railway is greatly in favor of this mill, as it conduces to a great measure of promptitude in delivering of material and filling orders. The shipments by water have also been on a very extensive scale, and will continue so till the close of navigation, when the mill will shut down for a short time to make slight repairs, previous to entering on winter operations.

A DESTROYER IN THE SPRUCE FORESTS IN MAINE.

According to accounts of observations published in the third bulletin of entomological division of the department of agriculture, the ravages of the spruce bud and worm (*Tortrix Fumiferana*) have been extensive and destructive in the coast forests of Maine west of the Penobscot river. The damage appears to have reached a few miles inland from the coast but the belt in which it has prevailed is marked by extensive masses of dead woods. The trees are attacked in the terminal buds, which are eaten away, and when that is done the case is hopeless. The fatal character of the attack is owing to the fact that the spruce puts forth but few buds, and those mostly at the end of the twigs, and when these are destroyed, it has nothing on which to sustain the season's life. The attack was made in June when the growth is most lively, and just at the time when the check upon it can produce the most serious results. The larches are also attacked by a saw fly, but with results that are not as necessarily fatal as in the case of the spruce. They are more liberally provided with buds, some of which may escape and afford a living provision of foliage. The larch, moreover, sheds its leaves in the fall, and is in full foliage before its enemies attack it. Hence, while the spruce and fir succumb to the first season's assaults, the larch can endure two years of them.—*Science Monthly*.

THE THIRD FIRE AT DULUTH.

Duluth, Minn., has again, for the third time, since July, says the *Northwestern Lumberman*, been visited by a disastrous lumber fire. At 1 o'clock on the morning of November 10th, fire broke out in the lumber yard of the Oneota Lumber Company, destroying about 8,000,000 feet of lumber partly belonging to other parties, the saw mill and 10 buildings, including boarding houses, store, office, dwellings, stable, etc., belonging to the same company, and the saw mill and yard of the Osterhout & Hugart Lumber Company. The losses are about as follows. Oneota Lumber Company, mill, lumber, houses, etc., \$60,000; insurance, \$28,500, lumber, \$8,000, store, etc., \$7,800; total, \$14,600. Osterhout & Hugart Lumber Company, loss on mill, lumber, etc., \$61,000; insurance on mill, \$13,000; on lumber, \$91,000. Other losses on lumber stored in yards are, Bradley, Hanford & Co., \$20,000; John McKinley Lumber Company, \$10,000; Duluth National Bank, \$5,000; Alfred Merritt, \$3,000; Freeman Keene, \$3,000. H. W. Coppernall, trustee for the Muskegon National Bank, \$40,000; DeLittle, \$3,000. The area burned over was about 30 acres, and it is

estimated that the total loss was 15,000,000 feet. The total loss is put at from \$200,000 to \$230,000, and the total insurance is \$176,000. The Oneota company shut down last Friday, and was said to be in arrears to its men, leading to the supposition that the fire was incendiary, from motives of revenge.

THE FORESTRY AGITATION.

People who are discouraged because the forestry agitation does not take hold better should remember that in France and Germany nothing was done to arrest the destruction of forests till the people began to fear that they would run out of fuel. They then instituted a very effective system of tree culture. In England the same result was reached by the discovery that much land which was unfit for agriculture could be profitably planted with trees. So in America, where the need presses, the trees are being grown. In Dakota, Minnesota, Nebraska, and some parts of Kansas, it is a common practice to devote a part of the farm to timber. Much of the pine land which is being cleared now will eventually be again given up to forest trees, because it is good for nothing else. Nothing much will be done in this direction, however, until lumber grows scarce and the scantiness in the supply gives promise of better prices. It may be taken for granted that every man will continue to clear his timbered lands whenever he wants more acres to cultivate in grain or whenever he chooses to sell the logs. Very few will be governed by any consideration for the climate, the streams, the springs, the floods, or other matter, except their own immediate gain. Measures to restore the forests will only be taken after their loss is felt.—*Southern Lumberman*.

LARGE TREES.

Michigan lumbermen sometimes lay claim to having cut some monstrous trees, remarks the *Lumberman's Gazette*, as in fact they have; but in comparison to a couple of redwood trees recently reported by the *Santa Rosa Republican* of California, the largest pine tree ever leveled in a Michigan forest would present the appearance of a mere sapling. The *Republican* says that "a redwood tree, cut in this country, furnished all the timber for the Baptist church in Santa Rosa, one of the largest church edifices in the country. The interior of the building is finished in wood, there being no plastered walls. Sixty thousand shingles were made from the tree after enough was taken for the church. Another redwood tree, cut near Murphy's mill, in the county, about ten years ago, furnished shingles that required the constant labor of two years before the tree was used up. The above statements are vouched for as true by Supervisor T. P. Proctor."

TREES IN CITIES.

The planting of Gray's-in-road will be no small part of the improvement of a district of London that till recently had few attractions, and if the Holborn Board of Works be stimulated to carry on the work it is only to be hoped that other bodies will follow the good example. Any one who has looked down on London from great height—say from St. Paul or Queen Anne Mansions—will have been surprised at its greenness. Little oases of verdure are freely spread about through the great wilderness of brick or soot-stained stone. And yet London does not give the general impression of a city where tree life is valued or cultivated. One great essayist of the past generation, who busied himself much with the charms and attractions of the great city, used to boast that in the busiest part of the capital a Londoner need still never lose sight of a tree, and he used to mention with pride and special example near Ironmonger lane which saved Cheapside from being an exception to his rule. But the truth is that London gas and London trees are hidden away from the ordinary pedestrian. They are to be met with in the parks and squares and in a few little secluded churchyards insulated and themselves almost buried in the surrounding bricks and mortar. In fact tree life for London is passing through a period of transition. Our ancestors planted elms and oaks apparently without much sympathy or appreciation of their

value. London grew apace. London atmosphere developed a new constituent and the smoke and soot flakes of a busy and dirty city killed many and stunted most of the city trees. Then came what may almost be called a discovery. The singular fitness of the plantain, shedding annually its year's growth of bark and the crop of soot that had settled upon it, was demonstrated just when it was needed. There is no reason why all the great London arteries might not show something of the greenness of the Thames Embankment. Portland place might be such a boulevard as Paris would be proud of. On the Ziel at Frankfurt they have freely planted trees that leave a Londoner without his favorite excuse of the climate and the smoke.—*London Daily News*.

A WOODEN TELEPHONE.

A score of merchants, brokers, publishers and reporters stood in a circle around a wooden box fastened to the wall of the second story of 67 Greene street and listened to the performance of the box, which was a new acoustic telephone, operated without the aid of electricity. A large wooden disk, with a mouthpiece two and a half inches in diameter, was fastened to the front of the box, and across the mouthpiece was stretched a diaphragm of wooden basket work. A non-insulated wire ran from a nickel plate key on the exterior of the basket-work across the street and four blocks up town to a companion talking box.

"Halloa, there, let me hear you sing," said a handsome young man with a brown mustache, who stepped out of the group around the telephone. He said this in a whisper that was not audible to other gentlemen standing less than three feet away.

"All right," bawled a voice at the other end of the line. "I'll sing," and a half a second later the notes of the "Sailor's Sweetheart" floated from the box so distinctly that it sounded as if somebody in the next room was singing. The notes of a mouth harmonicon and an ordinary metal whistle was transmitted with equal clearness; and when the orator blew his breath on the diaphragm the listener at the other end detected at once what he had done. He blew a horn that produced an echo like a fog alarm, called out fractions and stock figures clearly and closed the test with a swelling "Hurrah for Ben Butler."

"The secret lies in the diaphragm," said Inspector A. A. Knudson. "It is made of an imported wood. Four layers of it woven together are screwed to the mouthpiece disk, and then the telephone box is complete. The wire used to day is made of phosphor bronze, but ordinary steel wire can be used. It requires no insulation because no electricity is used. The diaphragm is so sensitive that it can reproduce the vocal vibrations distinctly even at a distance of two miles. Aspirates and sounds that it is impossible to transmit over any known telephone are produced by this diaphragm."—*New York Sun*.

WOOD PAVEMENTS.

As containing data and deductions of general interest, we publish a letter recently written by Joseph P. Card, of St. Louis, to O. Chanute, C. E. While the fact that the writer is president of a wood-preserving company should be given due weight, it should be also remembered that he is an expert in this line of practice, and has diligently studied all the bearings of the case from a business as well as a constructive standpoint:

"In the first place," says Mr. Joseph P. Card, "it is admitted by all, that it is of little use to lay any pavement without a good and substantial foundation, and none of the substances used requires this more than wood.

"Such being the case, a substantial concrete foundation is first laid, and it should cost the same, whether granite, wood, or other material be placed upon it; consequently the only thing to be considered is the cost of the wearing surface, the lasting qualities of same, and its desirability as a pavement when completed.

"In my opinion, the trouble with wood pavements in this country has been: First, the lack of a proper foundation. Second, the people generally have expected a wood pavement,

which should have cost as usually laid (with a board foundation) \$1.25 per square yard, to last as long as a granite pavement (with a concrete foundation) that cost \$4.50 or more per yard.

"Now we take Broadway, New York, for instance, which is 44 feet wide, with a concrete foundation, ready to receive either granite or wood blocks, and suppose granite block are laid at a cost of say \$3.60 per square yard, which would be equivalent to \$8.80 per front foot for the abutting property.

"On the other hand, a preserved wood block pavement is laid with blocks say 3½ inches by 6 inches deep, leaving a space of ¼ to ½ of an inch between the rows, to be filled with suitable material, at a cost of \$1.63 per square yard, or \$3.90 per front foot.

"Now what would be the result? The granite pavement would probably last 10 to 15 years with slight repairs, and the wood pavement 5 to 9; but for comparison we will suppose the granite to last 15 years and the wood 5.

"The granite costing \$8.80 per front foot, the wood \$3.90 for five years, or \$11.88 for 15 years (allowing two renewals), and deducting 79 cents difference in interest at 6 per cent. would make wood cost for this period of time \$11.09 per front foot, or a difference of \$2.29 per front foot, equal to 15 cents per front foot per year more than granite, which is virtually nothing.

"Now, in my opinion, the wood pavement would be more likely to last over five years than the granite to last 15; but if I am incorrect, who is there living or doing business in a street like Broadway, where property is worth thousands per front foot, that would not willingly pay the slight difference, or many times the difference to get rid of the incessant noise and confusion incident to a stone pavement?

"I think the thoroughfares should be paved with wood, and the by-streets with granite or stone, as it would last indefinitely.

"My reason for using a five inch wooden block is, that when the surface of the street becomes worn down to the extent of 2 to 2½ inches, it becomes so irregular that the remainder of the block, whether 2½ or 5 inches, are so softened with moisture, which accumulates in the depressions from rainfall or by sprinkling, that they soon go to pieces.

"Wood on end, if it could be kept dry, would outwear granite, as shown by Col. Flad's tests made at our water works here, consequently the drier the wearing surface is kept the less wear.

"Fully creosoted wood blocks under heavy traffic wear rapidly, as shown on the Brooklyn bridge, for the reason that the oil keeps the fiber soft.

"There was more wear on the St. Louis bridge, which is paved with wood, in the two months which the bridge was salted, to remove slush and ice, than in the balance of the year.

"In other words, the principal wear of any wood pavement occurs during wet weather, and the aim should be to keep the wearing surface of the wood as dry and smooth as possible.

"With a good concrete foundation once down, the wooden blocks could be renewed when necessary, during night time, with little or no inconvenience to travel.

"From a sanitary point of view, the concrete foundation would prevent what most people seem to dread, the leaking through of impurities to the soil beneath, while the treated blocks would disinfect any portion that might enter the same."—*Scientific American*.

THE prohibition of the importation of rags to this country, says the *Lumberman's Gazette*, has had the effect of advancing the interests of our wood pulp manufacturers, by increasing the demand for their product. The cholera in Europe is demonstrating the truth of the old adage that "it is an ill wind that blows nobody any good," and wood pulp manufacturers are still anticipating an advance in the price of their product, because of increased demand.

Wrecked Manhood.

Victims of youthful indiscretions suffering from nervous debility, lack of self-confidence, impaired memory, and kindred symptoms, should send three letter stamps for large illustrated treatise, giving means of certain cure, and numerous testimonials. Address World's Dispensary Medical Association, Buffalo, N. Y.