

proved pattern, under about 18 feet head. Four grinders will be placed in position at once. The log will be taken from the river, pass over a large circular saw, which will cut the bolts into right lengths for use. They will then be carried by a belt to the barking-machine; from thence to the double splitting machine, which will require four men to run it, and thence to the grinders. After leaving these, it is conducted below, into steam cylinders, and pumped by power, on the wet machine, so called, where the fiber is separated from the water, and taken off in sheets of clean, white pulp, suitable for making into paper, paper boxes, etc. It is then packed in bundles of 100 pounds each for market. When the mill is fully equipped, it will furnish employment for about 40 operatives.

Importance of Small Industries.

Speaking in Congress the other day of the need of encouraging certain relatively small industries, Senator Miller referred to the city of New York, the greatest manufacturing city in America—he might have said in the world—and "yet she has not a cotton mill, a blast furnace, or a rolling mill within her borders. Her manufacturing are small," he said, "but they employ more than a quarter of a million people.

It is worthy of notice in this connection that while recent patents have much to do with the means and methods of the great staple industries, such as steel and iron production, iron milling, cotton and woolen manufacture, and the like, the smaller yet in the aggregate immensely important industries are almost wholly based upon and due to the development of recently patented inventions.—*Scientific American*.

The Tariff Question.

The *Northwestern Lumberman* says:—The tariff question still broods like a cloud of doubt over the lumber business, especially at the East. A correspondent from Nova Scotia writes that an unusual effort is being made in that province to get in a large log crop. It is possible that the operators have an eye to the removal of the lumber duty, and intend to be ready for the main chance as against Ottawa and the Georgian Bay. It is noteworthy, however, that wages in Nova Scotia are higher than in previous years, and that labor is scarcer. It is barely possible that lumber cannot be produced any cheaper in the Dominion than on this side of the line, which would equalize the value of forest products on both sides as naturally as water finds a level.

Red Lake Flue.

The Gaand Forks *Plainsdealer* says that the men interested in the growth of that place still have their anxious eyes on the Red Lake pine, and do not intend to be put off their guard because there is silence regarding the Washburn bill. The *Plainsdealer* asserts that the pine of the Red Lake region is tributary to Grand Forks, and that city has the enterprise and capital to obtain and manufacture it into lumber, which can be furnished to the country to the westward at prices lower than are paid at Minneapolis. Every move is watched, the friends of Dakota in Congress are kept posted as to the wants of the territory, and it is hoped that the schemes of the Minneapolis men will be baffled.

The Tariff and Hemlock.

The Saginaw valley lumbermen are especially exercised about the effect of the tariff bill on hemlock lumber. One of them is said to have reported that the vast quantity of hemlock in Michigan is just coming into market, but if the duty on foreign lumber is removed, the Wolverine hemlock cannot compete with the Canadian product in Eastern markets. The country in northern Michigan is being cleared up, and the hemlock will be burned up if it cannot be cut and marketed. For this reason it is thought that placing lumber on the free list will particularly damage the hemlock interest.—*Northwestern Lumberman*.

The U. S. Tariff.

The *Northwestern Lumberman* says:—The opponents of free trade in lumber have beatified themselves since the senate act in placing lumber on the free list, and thousands of names

have been forwarded from all parts of the Northwest in opposition to the measure, while the promoters of the petition movement at Chicago have been flooded with correspondence urging, in nearly every case, the holding of a convention. As, however, it is deemed certain that the question will not be settled by this congress, or, if reached, will be defeated, it is not considered advisable by the Chicago committee to call a convention at this time.

A THOROUGH dosing of raw turpentine will clear hickory of the ravages of worms, destroying those already at work in the timber. It is a good expedient for carriage-makers and others.

A GRAPE-SHOT has been found imbedded in a pine tree in Jackson county, Ala., seven miles west of the Apalachicola river. It is supposed to be a relic of one of Gen. Jackson's Indian fights in the Seminole war.

THE *Northwestern Lumberman* says:—There was lately cut at F. N. Wright & Co's. camp, a little north of Stanton, Mich., a forked tree, which turned out 31 logs, but one having been rejected, 30 sound logs were obtained from the tree.

THE *Northwestern Lumberman* says:—Housé & Bros. are buying bird's-eye maple in Ogemaw county, Mich., to be shipped to New York city for veneering purposes. They will have shipped from Ogemaw county, when they have done, 50,000 feet. They are paying \$11 a thousand.

WHAT is called the boss cherry log of the country was recently got out at Potter, Pa. It was cut by James McNulty on Bingham's land at Ellison's pond, was 18 feet long, sound and clear, and scaled 1,550 feet. The scaler pronounced it the largest and finest cherry log he ever seen. It was all there was in the tree, weighed 10,850 pounds, and was worth \$150.

JAMES HARRIS, of Rising Sun, Ind., while engaged in sawing veneering from a walnut knot, discovered in the twisted fibres of the wood a perfect delineation of a spaniel's head. The lines are said to be as accurately drawn as if from the pencil of an artist, and so true is the semblance that even the expression of mute intelligence one often sees in canine visages is readily seen.

It is stated there are now more hemlock logs in the Allegheny river, Pa., between Connersport and the State Limits mill than there ever was before. The sleighing has been good and the streams frozen over. On account of unfavorable hauling conditions, it is said there was two years' supply of logs back in the woods at the opening of the present season. There is estimated to be 40,000,000 feet of logs in the water.

THE *Northwestern Lumberman* says:—The Flint & Pore road, in Michigan, is running about 15 log trains. The quality of the logs brought out is said to be better than those of last year. The Harrison branch of the road will be extended 12 miles beyond Harrison, which will increase the product of the road about 500,000,000 feet, while the branch built last fall from Coleman will open up about 700,000,000 feet.

Letter from Member of Congress. HOUSE OF REPRESENTATIVES. Washington, D.C., Feb. 19, '82.

GENTLEMEN,—Inclosed find \$1, and will you send me some of N. H. Down's Vegetable Balsamic Elixir by express. I have a bad cold, as has almost every one else here, but cannot find the Elixir, which I used frequently at home and consider a most valuable medicine; in fact, the very best remedy for a cold that I ever used. Very truly yours, WILLIAM W. GROUT.

LITTLE BY LITTLE.—The constant dropping of water will wear away even the hardest stone. So the constant irritation of a cough will so wear upon the lungs as to induce incurable Consumption. Haggard's Pectoral Balsam will cure the worst cough, speedily and effectually.

WALTER LINTON, of Waterloo, writes that Haggard's Yellow Oil has done great good in his family, his wife being cured of Callosus lumps that other medicines failed to remove, he also states that a neighbor was promptly relieved of Rheumatism by the same remedy.

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