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Rail-Road News.

Hudson River Railroad.

The Troy Post gives the annexed statement of the arrangement between the Hudson River and the Troy and Greenbush Roads:

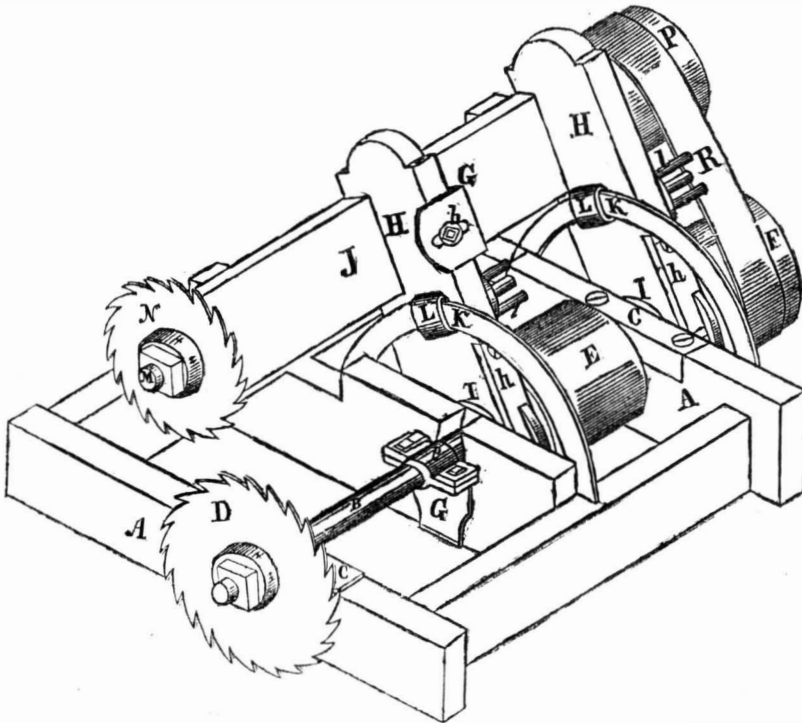
"The Hudson River Company have obtained a lease of the Troy and Greenbush Railroad, with all its implements and fixtures, for the term of its charter—thirty years—and for all future renewals, paying for the same seven per cent. annually, on \$275,000—payments to be semi-annually. The lease requires of the Hudson River Company that they shall run all their through trains directly to and from Troy, thus making this the northern terminus of their road. They are also required to keep up the local business of the Troy and Greenbush Railroad, running the cars, as now, for local accommodation and for transportation. We are informed that the Hudson River Company will, immediately after coming into possession of the Troy and Greenbush Railroad, construct a double track, straightening the same so as to lessen the distance, and putting down a new and heavier rail than is now used. Some \$150,000 will be expended for this object the ensuing summer; it is expected that the work will be completed, a new track or tracks constructed through the city—everything in order—sometime during the ensuing Fall. The Hudson River Railroad will be completed between Hudson and Greenbush in May next, when trains will be run direct from Troy to Hudson, and in September the whole line will be finished, and the cars running from Troy to New York."

Railroad Across Florida.

The New Orleans Picayune of the 18th inst., publishes a letter from Governor Brown, of Florida, relative to the above named road, and urging its construction upon the favorable regard of the citizens of New Orleans. He says respecting the project:—"I cannot imagine an enterprise in which the people of New Orleans should take a deeper interest. Connected with the contemplated route from the southwestern coast of the Gulf of Mexico, across the Isthmus of Tehuantepec to the Pacific ocean, it completes the entire line of steam transportation from the extreme Northern States on the Atlantic to the Pacific, passing directly through the city of New Orleans. A glance at the map must impress the mind with the importance of this link between the Atlantic and the Gulf, through Florida, in the great chain connecting the two oceans."

The style of the proposed road is the "Florida, Atlantic, and Gulf Central Railroad," and its charter has no restrictions as regards the termini, which may be located at the most suitable points on the Atlantic and on the Gulf side. This railroad will become one of the most important in the whole of our continent.

IMPROVEMENTS IN MACHINERY FOR SAWING TIMBER---Figure 1.

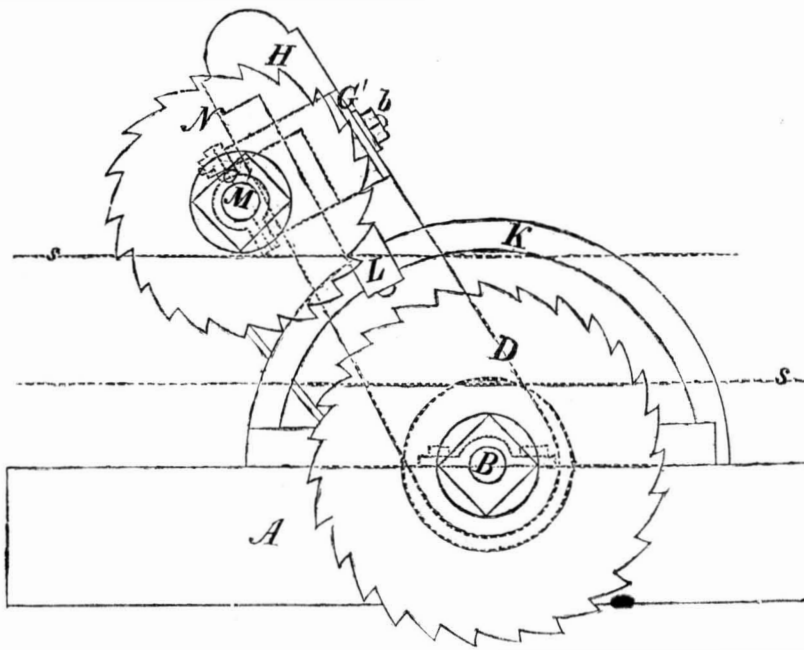


This is an improvement on machinery for sawing timber, invented by Mr. Orlando Child, of Granville, Putnam Co., Ohio, and for which a patent was granted on the 17th of last December, the claim of which was published on page 118 of the Scientific American.

Figure 1 is a perspective view taken at the back of the saws; figure 2 is a side elevation. The same letters refer to like parts. The principles of the invention embrace two prominent features. One is a strong spring attached to the frame, the object of which is to prevent the end play of the saw shaft without using collars, and at the same time will yield to the pressure on the sides of the saw occasioned

by the springing of the log, and thus prevent the heating of the saw by the pressure of the log, which pressure sometimes destroys the saw. The second feature is the application of an additional saw, having its spindle working in bearings attached to swinging arms capable of being adjusted and secured at any point in a line forming part of a circle to be set in different positions, so as to assist in sawing through the same log with the larger saw, and it also can be set so as both saws can act, and two separate boards be cut up out of the same log at once. A A is part of the frame of a saw-mill; B is the stationary saw spindle; C C are the bearings; D is the saw

Figure 2.



secured on the spindle; E is the driving pulley; F is another pulley keyed on the same shaft; G is a strong spring of flat steel secured at its lower end to the frame, A. On its upper end there is a journal box q (letter turned wrong way by engraver), fitting to the spindle, B.

H H are swinging arms attached by metal straps, h h, to circular bosses, I I, provided with flanges to prevent the swinging arms from slipping off. The bosses, I I, are hollow,

to allow the spindle, B, to pass through them, and are concentric with the said spindle; the arms, H H, fit on the said bosses so as to allow of their being easily swung in any required direction. J is a plank or table secured across the front of the arms, H H. K K are arches formed of flat bar iron attached at each end to the frame, A. L L are bolts having their heads formed so as to embrace the arches, K K, these bolts pass through the arms,

H H, and are provided with nuts, l l, for the purpose of securing the arms, H H, to the arches, K K, and holding them in any required position. M is a spindle carrying a saw, N, and rotating in bearings bolted to the front of the plank or table, J. P is a drum or pulley fast on the spindle, M. R is a driving band for communicating motion from the spindle B to the spindle M. G' is a spring attached to one of the arms, H, it is forked, each end of the fork passes through a slot in the plank or table, J, and is attached to a journal box, which fits to a journal turned in the spindle, M; its effect on this spindle is precisely similar to that of the spring, G, on the spindle, B; the spring, G', is attached to the arm, H, by a screw bolt, b, passing through a slot in the spring into the back of the arm, by which it may be adjusted; the spindle, M, passing freely through, may be moved in the direction of its length so as to set the saw, N, in or out of line with the saw, D, as represented by strong dotted lines, S S, in fig. 2. The operation is as follows:—if it is required to cut a log, which would be too large for the saw, D, to cut through, the arms, H H, are raised to about the position represented in figure 2, the lower part of the periphery of the saw, N, being set rather lower than the upper part of the periphery of the saw, D, and is secured in such position by the bolt and nut, L l, when it is ready for operation.

If it is required to make two cuts in a smaller log, the arms, H H, are secured in the position shown by lines in figure 2, bringing the saw, N, almost on a level with the saw, D; the spindle, M, is moved in the direction of its length, so as to set the saw, N, the required distance in the required direction, right or left of the saw, D. The saw, N, may also, if required, be moved to a vertical position clear of the log. Rotary motion being communicated by a band to the pulley, E, or by other convenient means to the shaft, B, is transmitted by the band, R, to the drum or pulley, P, on the spindle, M, causing both saws to rotate in the same direction.

The advantage of using two small saws, in place of one large one, for cutting thick lumber, is not only in the very great saving in the cost of the saws, but also in the economy of working; the small saws being thinner will cut away less timber and run proportionately lighter and at less expense of power.

In using circular saws, the lateral springing of the timber is found in many cases to press so heavily on the sides of the saw as to cause great friction, and heat the saw to such a degree as to injure it; this will be obviated by guiding the saw by means of the spring, G, and its journal box, the spring being of sufficient strength, to prevent end play of the spindle, but at the same time yielding to the lateral pressure, caused by the springing of the log, will cause the saw to run lighter, will make less noise, and will make a cleaner cut.

More information may be obtained by letter addressed to Mr. Child.

The Duke of Wellington once left his umbrella by accident, on the stall of a lady of rank, at a fair. On returning to look for it, he was told that the umbrella had just been sold for twenty-five guineas by the lady, who could not resist the temptation of disposing of so valuable a relic, for charitable purposes.

Large Balloon.

John Wise, Esq., of Lancaster, Pa., is engaged in constructing another monster balloon, to be about three times as large as the "Hercules," used last summer, with which he intends to prove the certainty of his ability to cross the Atlantic and circumnavigate the globe.