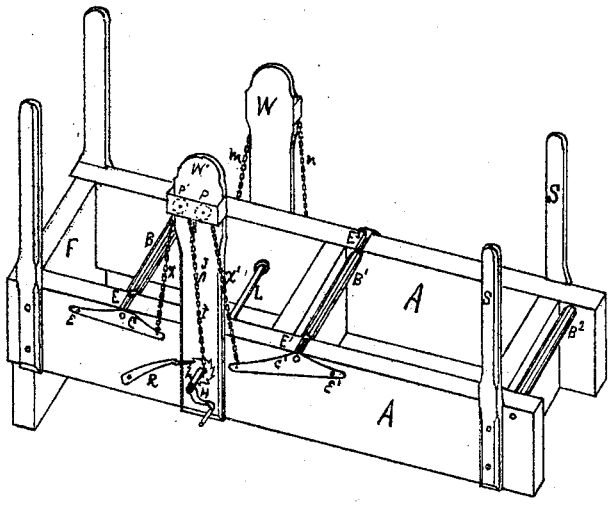
R. B. WOODCOCK.

Improvement in Lumber-Racks.

No. 114,897. Patented May 16, 1871.




Witnesses.

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ROBERT B. WOODCOCK, OF GRAND RAPIDS, MICHIGAN.

Letters Patent No. 114,897, dated May 16, 1871.

## IMPROVEMENT IN LUMBER-RACKS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ROBERT B. WOODCOCK, of the city of Grand Rapids, county of Kent and State of Michigan, have invented certain new and useful Improvements in Lumber-Racks; and I do hereby declare that the following is a full, clear, and sufficient description of my invention, reference being had to the accompanying drawing and the letters of reference marked thereon, and the same are made a part of this specification.

In the drawing—

The figure represents a general view of my invention in perspective, when constructed ready for use.

A A in the drawing represent the side pieces of the rack.

The front piece F is so constructed as to project or extend below the side pieces A A of the rack, so the load placed upon the rack rests upon an incline, the front end of the load being the highest.

$B^2$ is a roller at the back end of the rack, and B and $B^1$ are two rollers arranged at suitable distances from each other, as shown in the figure.

The roller B has a lever at either end, in which it turns or revolves as the rack discharges its load, as hereinafter described.

One of these levers is shown in the figure by C.

This lever turns upon the bolt E, which passes through this lever at its front end, and fastens it to the side piece of the rack.

A chain or rope is attached to the other end of the lever C, which passes over the pulley P′ in the stake W′, and is attached to the chain or rope *t*, as shown.

The roller $B^1$ rests in levers similar to the levers already described.

One of these levers is shown by *c*. This lever turns upon the bolt E′, as shown.

The other end is provided with a rope or chain passing over the pulley P and attached to the chain *t*.

The chain *t* is attached to the revolving shaft L.

The lever C′ is similar to the lever C already described, and turns upon the bolt E′.

A chain or rope is attached to its front end and passes over the pulley P, and is attached to the chain *t*.

The opposite side of the rack is provided with levers and chains or ropes similarly constructed and arranged, and operating in the same manner as those shown in the drawing and already described.

The shaft L is provided with the ratchet-wheel W, pawl R, and crank H.

In using my invention the load is placed upon the rack, the load resting upon the cross-pieces of the rack.

A rope or chain is attached to the hook J and passed over the load and attached to a similar hook on the opposite side of the rack.

The chain *t* and the chain corresponding with it, situated upon the other side of the rack, are loosened by means of the shaft L, and the binding-chain is drawn tight over the load and attached to the hook J, as already described.

The chain *t* and its corresponding chain, which we will call *t′*, are then tightened by means of the crank H and shaft L, drawing the binding-chain tightly over the load and securely binding it onto the rack, the chains which are attached to the levers being at the same time left slack, so as not to raise the levers when binding the load.

In discharging or dumping the load the binding-chain is removed, and the chains *t* and *t′* are rolled upon the shaft L by means of the crank H, thus raising the rollers B and $B^1$, an by that means the front end of the load.

The load then rests entirely upon the rollers B, $B^1$, and $B^2$, and is quickly discharged or dumped.

The arrangement of the chains is such that the roller B is raised faster than the roller $B^1$, thus placing the load upon a steeper incline, and causing it more readily to slide back upon the rollers.

The roller $B^2$ is so arranged that the load does not press upon it until the front end has been raised by means of the rollers B and $B^1$, and the rollers B and $B^1$ rest in grooves, so that the load does not press upon them until they are raised, as hereinbefore described.

My invention is especially adapted to the carrying of lumber and timber.

Having thus described my invention,

What I claim to have invented, and desire to secure by Letters Patent, is—

1. The arrangement of the rollers B and $B^1$, in connection with the levers C and C′, and the corresponding levers, the chains *x* and *x′*, pulleys P and P′, chain *t*, and the corresponding chains and pulleys on the other side of the rack, and the shaft L, when constructed and arranged so as to press the rollers B $B^1$ simultaneously against the load, substantially as described.

2. The arrangement of the binding-chain, in connection with the chains *t* and *t′* and shaft L, substantially as described.

3. The combination of the rollers B $B^1$, pivoted levers *x x′*, pulleys P P′, chain T and crank-shaft L, all arranged to operate substantially as described.

In witness that I claim the above I have hereunto subscribed my name this 15th day of October, A. D. 1870.

ROBERT B. WOODCOCK.

Witnesses:

EDWARD TAGGART,

CHAS. O. SIMONDS.