(No Model.)

H. RICH.

DEVICE FOR LAUNCHING LUMBER PILES.

No. 401,370. Patented Apr. 16, 1889.

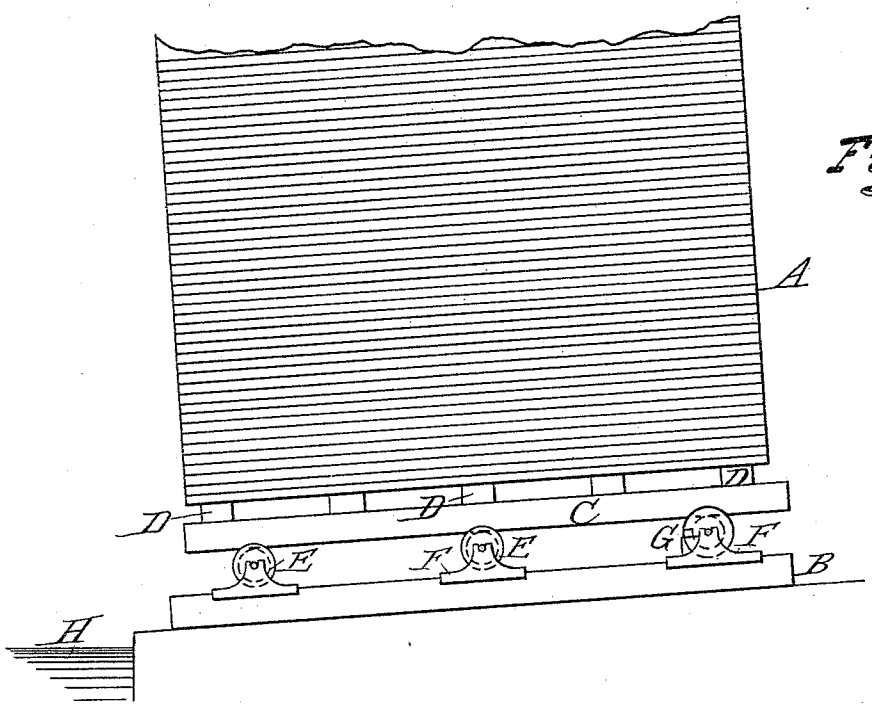


Fig. 1.

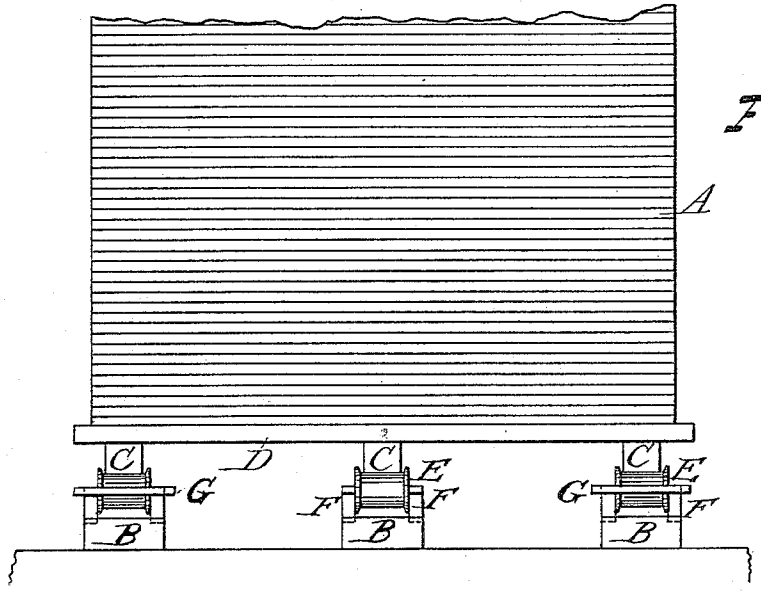


Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

HARRISON RICH, OF MUSKEGON, MICHIGAN, ASSIGNOR OF ONE-HALF TO EDWIN RICH, OF SAME PLACE.

DEVICE FOR LAUNCHING LUMBER-PILES.

SPECIFICATION forming part of Letters Patent No. 401,370, dated April 16, 1889.

Application filed July 5, 1888. Serial No. 279,040. (No model.)

To all whom it may concern:

Be it known that I, HARRISON RICH, a citizen of the United States, residing at Muskegon, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Devices for Launching Lumber-Piles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a device for launching piles of lumber or overturning them into the water, and it is especially designed for use in case of fire among lumber-piles that are customarily located on the banks of streams or rivers contiguous to the water; the object of the invention being to provide means whereby such lumber can be easily, quickly, and effectually transferred from the shore into the water of the stream, and thus the further progress of the fire be checked.

The invention consists in the construction, arrangement, and combination of parts, substantially as will be described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of my improved device for launching piles of lumber, and shows a portion of one of the lumber-piles in position upon the launching device. Fig. 2 is an end elevation of the same.

It is well known that in localities where lumber is extensively manufactured piles of it are built up in close proximity to the water for the purpose of facilitating the shipment thereof. Destructive fires have often taken place among the heaps or piles of lumber thus arranged, and in many instances vast quantities of property have in this way been destroyed. One of the chief reasons why a conflagration, after it has once broken out in a locality of this kind, assumes such great proportions is that the owners and manufacturers of the lumber, in order to economize space, usually build up the piles of the lumber within a few feet of each other, so that there is little space between; hence a fire, when it has once been started is readily communicated from one pile of lumber to another until a whole series of piles are overtaken.

My invention aims, by providing a device which will throw the piles into the river, to stop the progress of the fire after it has once broken out, and thus reduce the loss to a minimum.

A denotes a portion of a lumber-pile which has been built up in any convenient shape and size in close proximity to the river or other stream of water, which in Fig. 1 is designated by H.

B B B represent the foundation-timbers. They are placed on an incline sloping toward the water, as will be seen upon inspection of Fig. 1, and are located on the dock proper, or upon the bank of the stream. In a word, it may be said that the beams B B B are suitably supported in an inclined position, and are arranged so as to be stationary. They carry a series of rollers, E E E, which are journaled in the brackets F F F, that are securely fastened to the beams B B B by means of bolts or other suitable means. Each of the beams will have a series of rollers the number of which may be greater or less, as preferred. In the drawings I have shown them as numbering three to a beam; also, for the sake of example merely, I have shown three beams B, although of course it will be understood that there may be any number of them. The rollers E E E are flanged in such a manner that there are peripheral surfaces presenting grooves or channels to receive other timbers, to be hereinafter described. Those of the rollers E E, which are located farthest away from the water—that is to say, those which are located on the portions of the beams B B B at the highest level—are constructed with larger and heavier flanges than those on the middle and front of the beams. These large flanges of the rear rollers are provided with grooves cut therein, which grooves are opposite each other, and are adapted to receive square bars G, the ends of which rest on the boxes F F on each side of the rollers.

The iron bars G G are shown in both figures, and it will be readily apparent that when they have been inserted into the opposite notches or grooves in the pulleys, with their ends resting on the boxes F F, as aforesaid, said pulleys E E will be securely locked

and effectually prevented from rotating so long as the bars G G remain in place. I have chosen to describe the rear rollers, E E, as thus constructed, so as to be locked; but I have done this for example only, and I do not intend to confine myself to them, but may, if desired, construct other of the rollers so that they may be locked instead of having the rear rollers locked.

C indicates a heavy piece of timber long enough to bear on all of the three rollers which form the series with which one of the beams B is provided. This heavy piece of timber is sufficiently long to extend a considerable distance past each end roller. Each series of rollers E E will support one of the beams C. On these timbers are placed transversely another set of timbers, D D, of a proper and suitable length. After these are located in position the device is ready to have the work of building the pile of lumber commenced thereon. By inspecting the drawings it will be noted how the boards are placed upon the launching device. The pile may be carried to any desired height. As certain of the rollers are locked in the manner already described, it will be evident that the pile of lumber will have a secure foundation and will be immovable. The pile of lumber will be no less firmly supported than if it had been built upon the dock itself, or upon the bank of the river. When those pulleys which are locked are unlocked, the pile of lumber will begin to move and will be quickly launched into the water. The rear pulleys, E E, which are locked by the iron rods or bars G G, will be easily loosened by the removal of these bars or rods. Such bars can be removed at any time and very speedily, so that when a fire takes place in any pile of lumber, the one nearest to it which is built upon the launching device, already described, may be immediately deposited into the water, thus leaving a large opening which will assist in checking the fire.

Although I have shown the device which locks the rollers to consist merely of a bar of iron inserted in grooves cut in the flanges of the roller, yet I do not wish to confine myself to this kind of a locking device, but would state that other means of fastening the movable timbers C C to the stationary timber B may be employed without departing from the spirit of my invention. When the iron rods are used, it will be evident that after they have been removed from the notched rollers said rollers will be free to revolve, and the whole structure above the rollers will move down the incline until it overbalances and is plunged into the water.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device for launching lumber-piles, consisting of a series of inclined rollers adapted to support the lumber-pile, and means, consisting of a bar, for locking and unlocking certain of these rollers, so that the lumber-pile may be caused to move when desired, substantially as described.

2. In a device for launching lumber-piles, the inclined bed, the series of rollers located thereon, certain of which are grooved and held by a locking-bar so as not to rotate, and a lumber-supporting frame arranged upon the rollers, substantially as described.

3. In a device for launching lumber-piles, the combination of the beams B B B, each carrying a series of rollers, E E E, journaled in brackets F F F, the beams C C, carried by the rollers, and the transverse beams D D, located on the beams C, substantially as described.

4. In a device for launching lumber-piles, the combination of the beams B, carrying rollers E, journaled in brackets F, the rearmost roller adapted to be locked against rotation by the bar G, the timbers C C, and the transverse timbers D D, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HARRISON RICH.

Witnesses:
ROBERT WEIR,
D. J. MORIARTY.