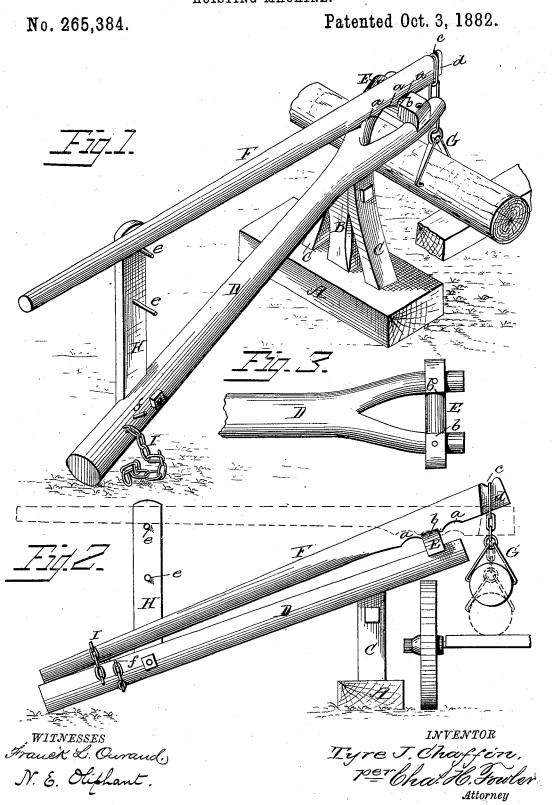
T. J. CHAFFIN.
HOISTING MACHINE.



## UNITED STATES PATENT OFFICE.

TYRE J. CHAFFIN, OF CRYSTAL SPRINGS, GEORGIA.

## HOISTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 265,384, dated October 3, 1882.

Application filed July 27, 1882. (Model.)

To all whom it may concern:

Be it known that I, Tyre J. Chaffin, a citizen of the United States, residing at Crystal Springs, in the county of Floyd and State of Georgia, have invented certain new and useful Improvements in Hoisting-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my invention; Fig. 2, a side elevation of the same, and Fig. 3 a detail view.

This invention relates to certain new and useful improvements in devices for loading, unloading, and general handling of logs and heavy timbers; and the object thereof is to provide a simple and effective means whereby 20 logs or heavy timbers may be quickly and easily placed upon a wagon or removed therefrom by one man, thus saving time and expense, and also doing away with the liability of the log or other timber falling upon and injuring parties 25 handling the same, as is often the case where they are loaded, unloaded, or otherwise handled by main strength; and the device, being simple in its construction, can be cheaply manufactured, and by its use the general handling 30 of logs and other heavy timbers is greatly facilitated. These objects I attain by the construction substantially as shown in the accompanying drawings and hereinafter described.

In the accompanying drawings, A represents a sill or base, to which is fitted an upright standard, B, braced by side pieces, C C, said standard supporting one end of a beam, D, having its other end resting upon the ground, thus causing it to assume an inclined position. This beam A is bifurcated at its outer end to form supports for a fulcrum-bar, E, said bar being made convex between the bifurcations of the beam D to fit concavities a upon the under face of a lever, F, these concavities admitting of the adjustment of the lever to suit the distance of the wagon from log or timber to be loaded. The fulcrum-bar E is provided with shoulders b at the extremities of the convexity, to prevent any lateral displacement of the lever F when operating there on The lever E is provided at its outer end

with a notch, c, upon its upper face, to admit of a pair of grapples, G, being connected thereto to engage with the log or timber to be raised or lowered, and the said outer end of the lever 55 is cut away, in the manner illustrated at d, so as to allow of the connecting-link of the grapples having an easy play.

Bolted or otherwise secured to the beam D, near its inner end, is an upright, H, having 60 supports e, upon which to rest the lever F in the process of hoisting, and to this beam D is also secured a chain, I, for the purpose of holding the said lever when brought down to raise the log or timber, the said chain being brought 65 around the lever and beam and hooked upon a pin, f, driven in the said beam.

When a log is desired to be removed from a wagon the lever F, carrying the grapples G, is raised to the position shown in dotted lines, 70 Fig. 2 of the drawings, and the grapples driven into the log. The lever is then brought down a sufficient distance to raise the log from the wagon-body and secured in that position by means of the chain I upon the beam D, said 75 chain being brought around the lever and beam and hooked upon the pin f. The log now being clear of the wagon, the team is started and the said wagon drawn from under the log. The lever is now uncoupled and the log lowered to 80 the ground, the grapples disconnected, and the said log rolled away to make room for other wagons, the whole operation being readily performed by one man, thus saving time and expense in the handling of logs or other timbers 85 about a saw-mill or other place.

While I have described the operation of my device as unloading a log from a wagon, it may be as readily used to load logs upon a wagon or to raise them from the ground to the platform of a saw-mill, or, in fact, for any lifting of logs or heavy timbers, to do away with the handling of such timbers by main strength of several men, accidents frequently occurring whereby life and limb are endangered.

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

provided with shoulders b at the extremities of the convexity, to prevent any lateral displacement of the lever F when operating thereon. The lever F is provided at its outer end per face, near its outer end, in combination

2 265,384

with the grapples G and the upright H, fulcrumbar E, and chain I, secured to the bifurcated beam D, substantially as and for the purpose set forth.

2. In a device for handling logs or heavy timbers, the bifurcated beam D, provided with the convex fulcrum-bar E, having shoulders b, upright II, and chain I, in combination with the sill A, standard B, braced by side pieces,

C C, lever F, and grapples G, substantially as 10 and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

TYRE JEFFERSON CHAFFIN.

Witnesses:

J. C. McDonald,

J. B. HINE.