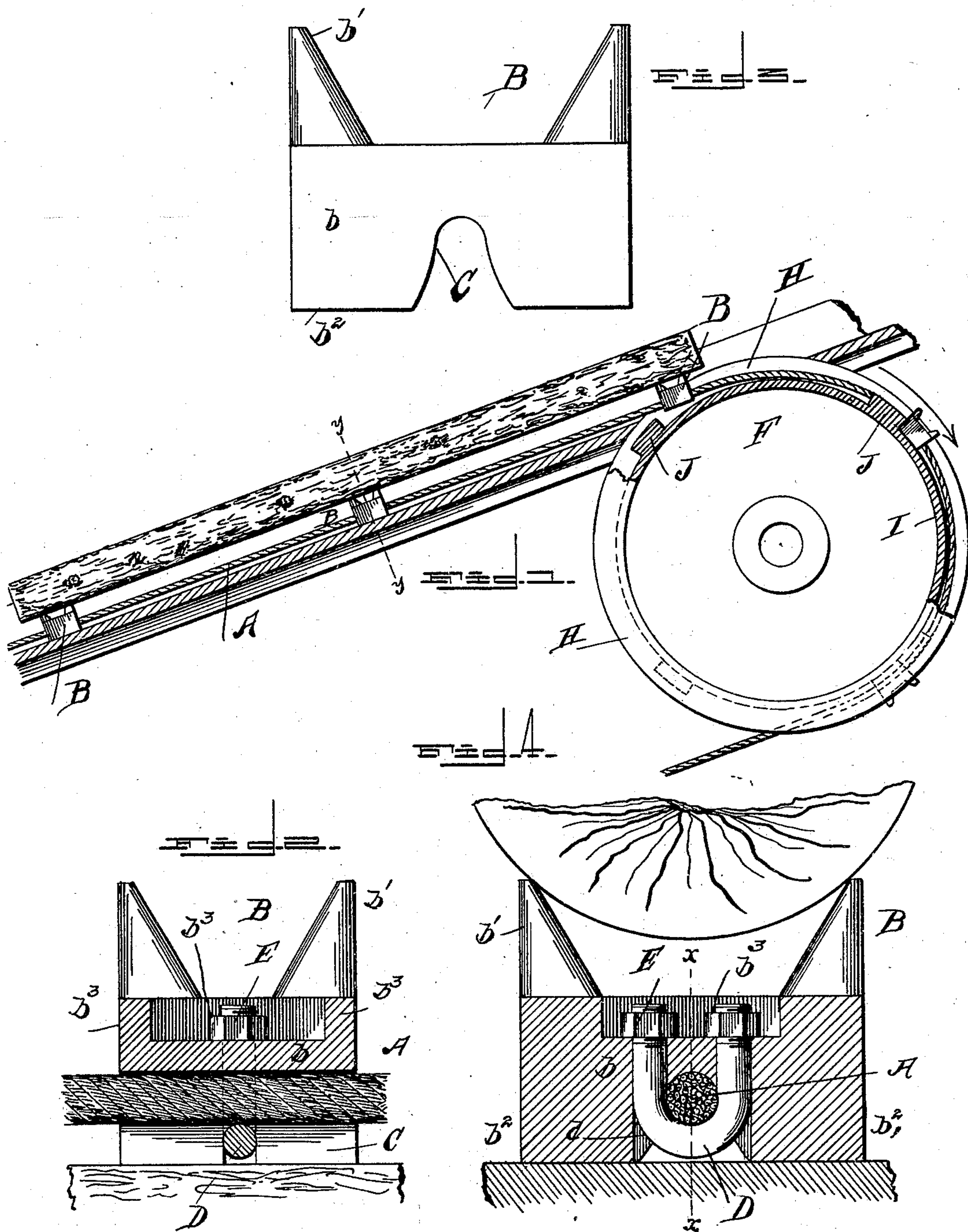


(No Model.)

J. H. HAHN, Jr.
CABLE HAUL MECHANISM.

No. 503,908

Patented Aug. 22, 1893.



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CABLE HAUL MECHANISM.

SPECIFICATION forming part of Letters Patent No. 503,908, dated August 22, 1893.

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To all whom it may concern:

Be it known that I, JOHN H. HAHN, Jr., a citizen of the United States, residing at Sargent, in the county of Texas and State of Missouri, have invented certain new and useful Improvements in Cable Haul Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improvements in mechanism for hauling logs along the guideways used in saw mills for transporting the logs either from the water up to the sawing floor, or from place to place along the floor.

15 It has more particular reference to improvements in log conveying devices in which use is made of wire rope as the main element for propelling and connecting together the parts which engage with the log. Generally these
20 hauling devices for logs have been made with chains for the propelling and carrying parts, the links either being formed with upward projecting spurs, or having attachments secured thereto provided with spurs. In all
25 cases within my knowledge, the attachments or fastening devices have been passed through the chain, or they and their load have been above the chain. These chain log hauls are expensive and liable to rapidly wear out, and
30 are incapable of use except over a limited distance.

One of the purposes of the present invention is to provide a log haul up of the class in which use is made of a wire cable instead
35 of a chain, and in which the attachments and their fasteners must pass around but not through the cable. Log hauls of this cable class can be used to advantage where cheapness is demanded, and where the logs are to be carried over comparatively long distances, the
40 cable not requiring the same accuracy of aligning of the guideways and the wheels, &c., that is requisite when chains are employed.

45 Heretofore these cable log "haul-ups" have consisted of the wire cable and log engaging attachments secured thereto each of which attachments was made in two halves, an upper one and the lower one, secured together by
50 bolts, each having a semi-cylindrical cavity

for partially inclosing the cable, and the upper one having upwardly projecting prongs or fingers adapted to engage with the log. An extensive experience with these earlier devices has shown me that they cannot be relied on, 55 owing to radical defects incident to the principle upon which they are constructed. When the weight of the log is brought to bear upon the upper part of the attachment said part is forced down toward the lower half, and the
60 bolts are more or less slackened; and, as a result, the grip upon the cable is decreased and it slips more or less through the attachments. I have obviated the difficulties referred to by constructing the attachment for the cable 65 with the features herein below described.

Figure 1 is a side view of a mechanism containing my improvements. Fig. 2 is a cross section on the line x, x of Fig. 4. Fig. 3 is an end view of the attachment. Fig. 4 is a section enlarged on line $y-y$, Fig. 1. 70

In the drawings A represents a wire rope or cable. To this are secured at suitable, and substantially equal intervals the attachments which are adapted to engage with the logs. 75 One of these attachments is indicated as a whole by B. It is so constructed as to have integral masses of metal extend continuously from the top to the bottom. It is formed with a central or intermediate body part b from 80 which there extend upwardly prongs, points, or fingers b' adapted to pierce somewhat or engage with the logs; and has downwardly extending parts at b^2 for riding upon the guide-way and for engaging with the driving 85 wheels.

By examining the drawings it will be seen that the metal is integral from the upper ends of the prongs or points to the lower edges of the parts b^2 , that is to say, to the bottom surface of the attachment which rests upon the guide way, and therefore when a log is resting upon the said prongs or points there will be no tendency for the distance between these parts to be lessened. 95

At C there is a passage way or open slot extending from the front surface through to the rear surface of the attachment, and by means of this the cable can be readily inserted or removed. 100

In order to bind the attachments firmly to the cable I employ one or more stirrup bolts D, the central part of which lies beneath the cable, and the legs of which pass up through apertures *d* in the attachment. Above the body part of the attachment there are nuts E, E, engaging with the threaded ends of the stirrup bolt and by means of them a powerful clamping action can be had. These nuts and the legs of the bolt lie in such position that the log cannot come in contact with them and therefore its downward pressure does not act to release the binding of the attachment to the cable. The advantage of this attachment in comparison with those which are transversely divided into two halves on the plane running through the center of the cable will be readily understood. The pressure or weight of the log is received by metal which is solid from top to bottom and therefore there will be no liability of the clamp or attachment to slip in relation to the cable. To insure that the bolt D and the nuts E shall not come in contact with the log projections, flanges or walls, such as shown at *b*³ may be extended up from the body part *b* of the attachment, which will also act to reinforce or strengthen the log engaging prongs or fingers *b'*. The attachments move along upon a beam, board, or other support, or guide way, at the time they are under the load, as will be seen on examining the drawings.

The cable conveyer is supported and guided upon wheels shown at F and G, which may be of any kind to drive and be driven by it, I preferring not to claim the wheel in this application. The driving wheel is formed with a drum like periphery I, flanges H, and projections or teeth J to engage the attachments on the cable.

The above described parts of the wheel co-act to insure that under all circumstances the rope or cable shall be guided and held prop-

erly in relation thereto and be prevented from escaping therefrom.

The number of the ribs or projections J on the wheel can be varied according to the distances between the parts B.

What I claim is—

1. A carrier attachment adapted to be secured to a wire cable and to rest independently of the cable upon a floor or guide way, it having projecting parts *b'* upon which rests the log or load, and having the metallic body extending integrally down from said projections to the bottom surface which rests on the guide way, as set forth, whereby the load can be supported upon the attachment and the guideway independently of the cable, and a clamp or fastener bearing entirely against the outer surface of the cable, substantially as described.

2. A carrier attachment, adapted to be secured to a cable, and to have the load arranged centrally and vertically above the cable, and to support the said load, independently of the cable, it extending to lines below the cable whereby it can ride upon a guide way or floor when supporting a load, and having a clamp which frictionally engages with the under side of the cable, substantially as set forth.

3. The herein described carrier attachment, adapted to be secured to a cable, and formed of a metallic block, having a slot or passage way in the bottom, for the introduction of the cable, longitudinally of the latter, said slot or passage being of a depth greater than the diameter of the cable, and a threaded clamp and nut securing it to the cable, substantially as described.

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

JOHN H. HAHN, JR.

Witnesses:

EVERETT BEAZLEY,
MARION B. WOOD.