No. 776,169. PATENTED NOV. 29, 1904.

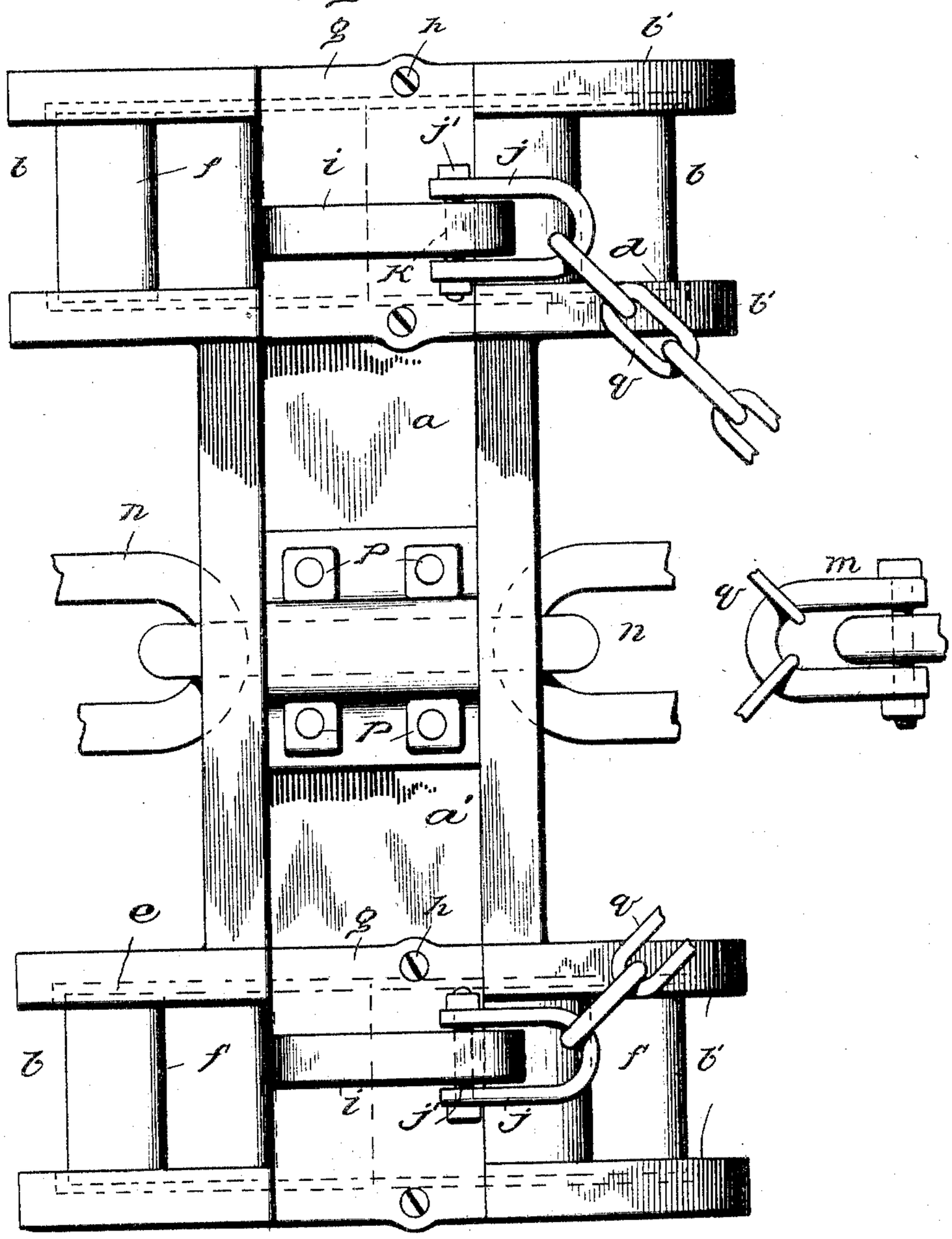
G. W. BROWER.

LOG HAULER.

APPLICATION FILED MAR. 1, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

FIG. 1.



Witnesses

Jno. Wheeler.

Inventor

George W. Brower

By J. A. Geisler

Attorney

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NO MODEL. 2 SHEETS—SHEET 2.

FIG. 2.

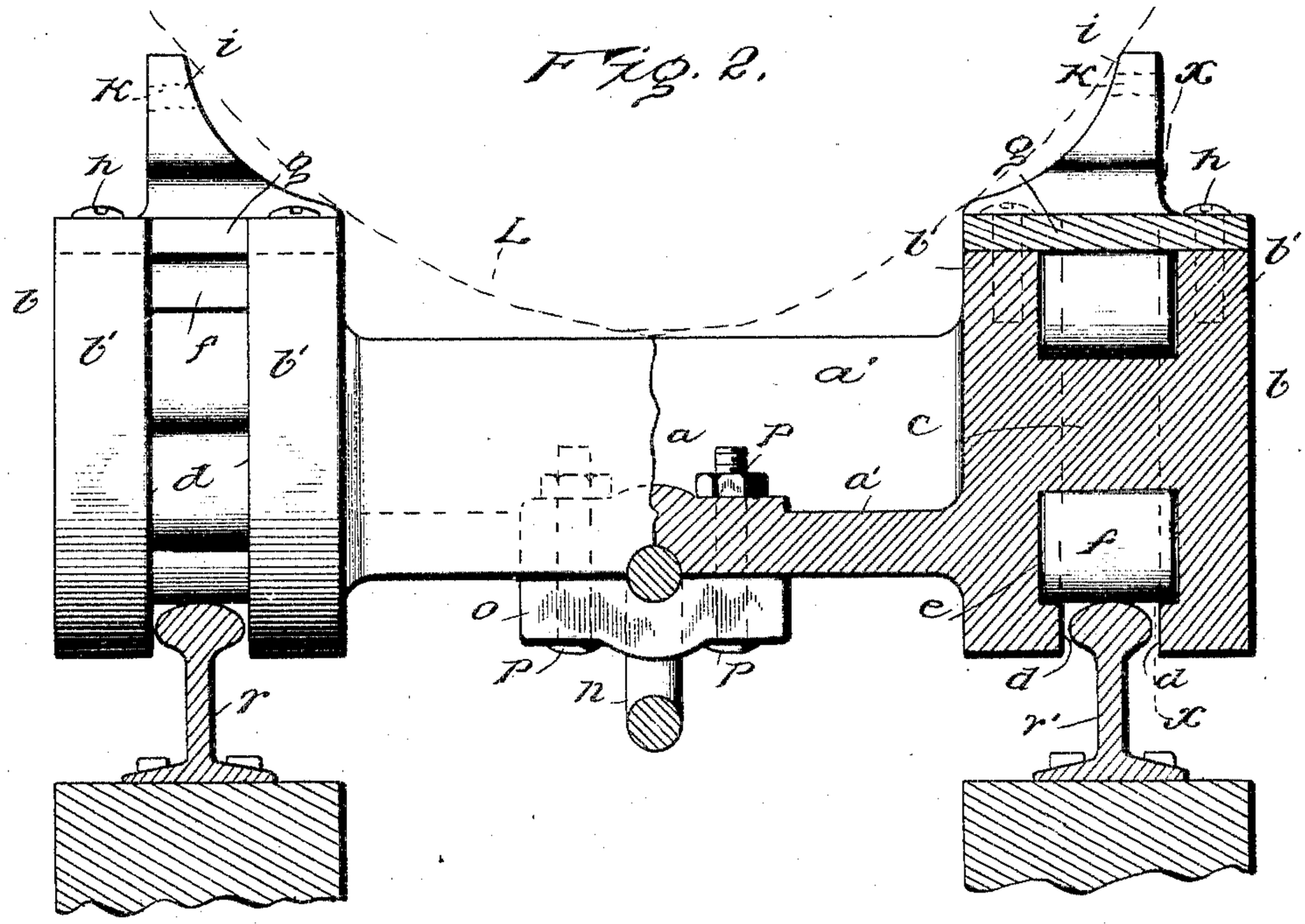
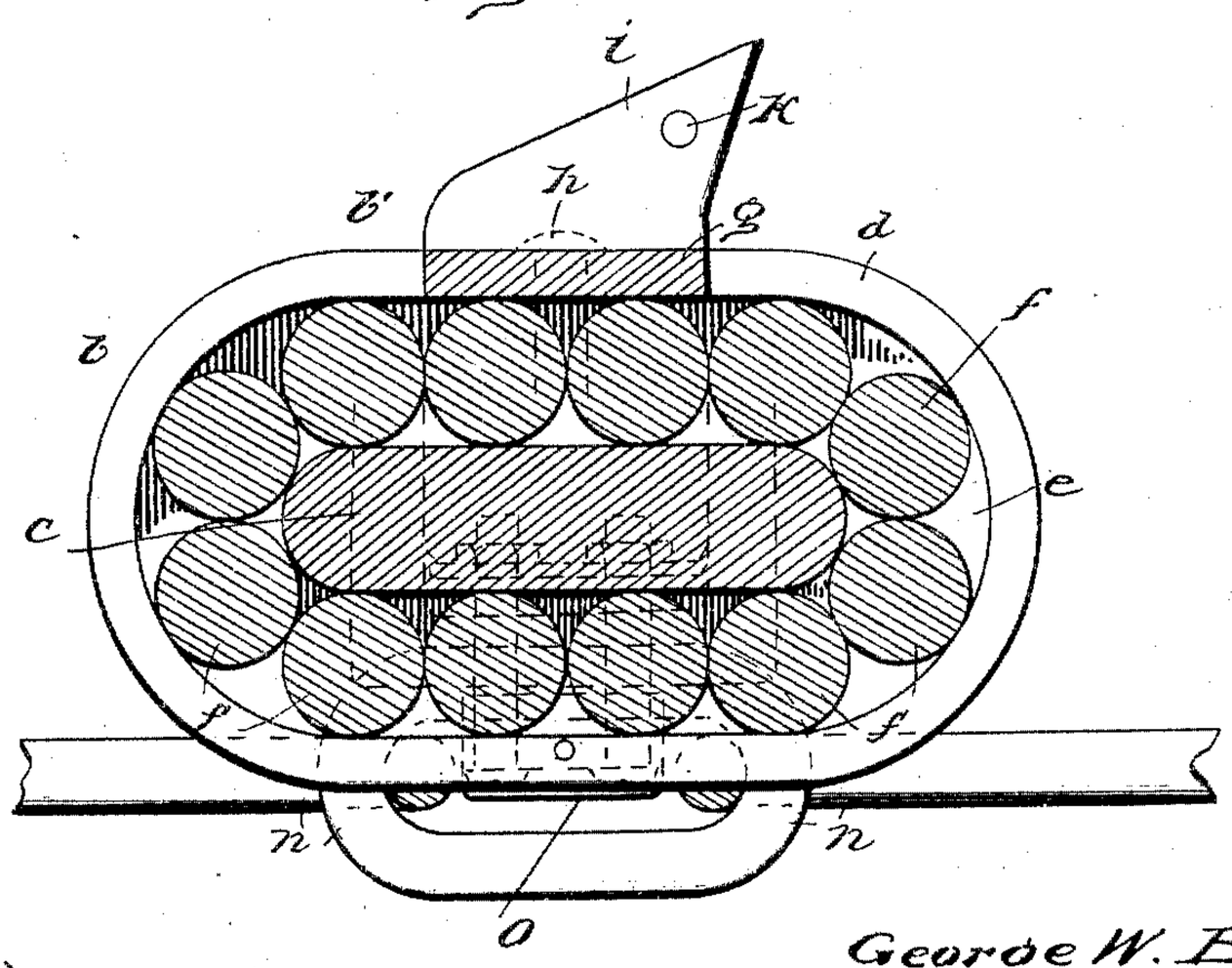


FIG. 3.



Witnesses
Jno. Shuman
Jno. Wheeler.

Inventor
George W. Brower
By J. J. Gensler
Attorney

No. 776,169. Patented November 29, 1904.

UNITED STATES PATENT OFFICE.

GEORGE W. BROWER, OF PORTLAND, OREGON, ASSIGNOR TO FRANK FRAYNE, OF PORTLAND, OREGON.

LOG-HAULER.

SPECIFICATION forming part of Letters Patent No. 776,169, dated November 29, 1904.

Application filed March 1, 1904. Serial No. 196,091. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BROWER, a citizen of the United States, and a resident of Portland, in the county of Multnomah and State of Oregon, have invented a new and useful Log-Hauler, of which the following is a specification.

My invention relates to the carrier means necessarily employed in sawmill plants installed on a river-bank for hauling the logs out of the river up to the elevated sawmill-platform, such carrier means consisting of a trestle or framework constituting an inclined railed way, an endless cable running on drums journaled in the ends of said trestle, and contrivances, commonly called "log-haulers," by which the logs are hauled up the inclined way.

My invention has for its object to improve the so-called "log-haulers" of said carrier means.

The particular type of log-hauler with which my invention is concerned consists of small car-like carriers on which the logs are supported lengthwise, the carriers being provided with projecting prongs adapted to slightly penetrate the logs, and thus hold the same in place while being hauled up the inclined way.

Since logs are of varying lengths, the described type of log-haulers is frequently impracticable. To overcome such difficulties, my log-haulers are adapted to conveniently handle logs of any length, and they are besides simply and durably made.

Incidentally my improved log-hauler also simplifies the construction of the inclined railed way—that is to say, my improved log-hauler is so constructed as to securely hold the log carried thereon against rolling off sidewise, and therefore it dispenses with the two elevated outside rails, one on each side of the rails on which the log-hauler runs, which elevated rails were necessarily provided to prevent the log rolling off sidewise when carried on one of the log-haulers heretofore in use.

These features of my invention are fully illustrated in the accompanying drawings, hereby referred to as a part of this specification, and are herein described and claimed.

In the drawings, Figure 1 is a plan of one of my improved log-haulers. Fig. 2 is a front elevation of the same, half in section. This figure also shows a cross-section of a part of the railed way and the position of the log being hauled thereon, a cross-section of the bottom portion of the log being shown by the dotted outline L; and Fig. 3 is a longitudinal section on a line *x x* of Fig. 2.

The letters designate the parts referred to.

The body of my log-hauler, as will be observed from Figs. 1 and 2, is a casting comprising a middle portion *a* and two end portions *b b*. The end portions *b b* comprise each two wall portions *b'*, connected by an intermediate integral bridge *c*. (See section Fig. 3.) The walls *b'* are respectively made with inwardly-projecting rim-flanges *d*, inclosing a runway *e* about the bridge *c*, in which to receive an endless chain of traveling rollers *f*. Said rollers are introduced in such runways through openings provided in the top part of the flanges *d*, and such openings are closed by plates *g*, secured in place by stud-screws *h*. The intermediate portion *a* comprises a bottom made with integral walls *a'*, the whole being designed to afford the desired strength. The plates *g* are respectively made with integral dog-like projections or prongs *i*, provided with holes *k*, through which to insert bolts *j''*, securing clevises *j*, these parts being shown only in Fig. 1.

To the clevises *j* are fastened the ends of stay-chains *q*, the outer ends of which are fastened to a clevis *m*, inserted in a link of the hauling-chain *n*, a section of which is shown in Fig. 1. The stay-chains are provided to hold the log-hauler in line with the track. My log-haulers are fastened to the hauling-chain *n* by means of a clamp-plate *o*, secured to the under side of the bottom of the intermediate portion *a* by means of bolts and nuts *p*. The opposite faces of the clamp *o* and said bottom of the intermediate portion *a* are respectively so made as to receive and clamp a link of the hauling-chain *n*, as more clearly illustrated in Figs. 2 and 3.

The inclined railed way on which my log-haulers travel while carrying a log is of the usual construction except that only two rails

r r' are required, these being arranged as shown in Fig. 2. As will be observed from Fig. 2, my log-hauler is supported at its two ends on the rails r r', the rollers f resting and traveling on the rails and the rim-flanges d of the end portions b serving to hold the log-hauler on the rails.

The position of the log while being carried on my log-hauler is shown by the dotted outline L in said Fig. 2 of the bottom portion of the log.

In hauling logs of ordinary length two of my log-haulers are sufficient, one at each end of the log. For logs of greater length an additional log-hauler may be employed for supporting the middle of the log. The log in resting on my log-haulers is caught and held by the prongs or dogs i, which, slightly penetrating the log, hold the same against shifting endwise or rolling sidewise.

The hauling-chain n is operated by means of a chain-wheel and other common devices not necessary to show. The arrangement of the trestle supporting the railed way and the sheaves and wheels carrying the hauling-chain are substantially in construction and arrangement as heretofore used, except that no additional elevated outer rails are required for preventing the log against rolling off sidewise, since the prongs i are sufficient to prevent such rolling of the log.

Having fully described my invention, what I claim is—

1. A log-hauler comprising an intermediate body portion and two integral ends b, the latter respectively comprising walls b' and an integral bridge c; inwardly-projecting rim-flanges d, on the walls b', thereby providing runways e; an endless chain of rollers f on each of such runways; dogs i on each said ends b, and means for fastening the log-hauler to the hauling-chain.

2. A log-hauler comprising an intermediate body portion and two integral ends b, the latter respectively comprising walls b' and an integral bridge c; inwardly-projecting rim-flanges d, on the walls b' thereby providing runways e; an endless chain of rollers f in each of such runways; plates g secured in a recess therefor in the rim of the walls b'; dogs i on said plates g; and means for fastening the log-hauler to the hauling-chain.

3. A log-hauler comprising an intermediate body portion and two integral ends b, the latter respectively comprising walls b' and an integral bridge c; inwardly-projecting rim-flanges d on the walls b' thereby providing runways e; an endless chain of rollers f, in such runways; a plate g, secured in a recess therefor in the rims of the walls b'; dogs i on said plates g; a clamp-plate o secured to the bottom of said intermediate body portion for clamping the log-hauler to the hauling-cable and means for staying the log-hauler in line with the hauling-cable.

4. In combination with a railed way comprising rails r r', and an endless hauling-chain, a log-hauler comprising an intermediate body portion and two integral ends b, the latter respectively comprising walls b'; and an integral bridge c; inwardly-projecting rim-flanges d, on the walls b' thereby providing runways e; an endless series of rollers f, in such runways; dogs i on said ends b; a clamp-plate secured to the bottom of the intermediate body portion, adapted to clamp the log-hauler to the hauling-cable; and stay-chains q, holding the log-hauler in line with the hauling-cable.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

GEORGE W. BROWER.

Witnesses:
T. J. GEISLER,
DOROTHY GILLIAM.