C. W. RUSSELL.

LOGGING CAR.

APPLICATION FILED APR. 19, 1909.

1,045,192.

Patented Nov. 26, 1912.

2 SHEETS—SHEET 1.

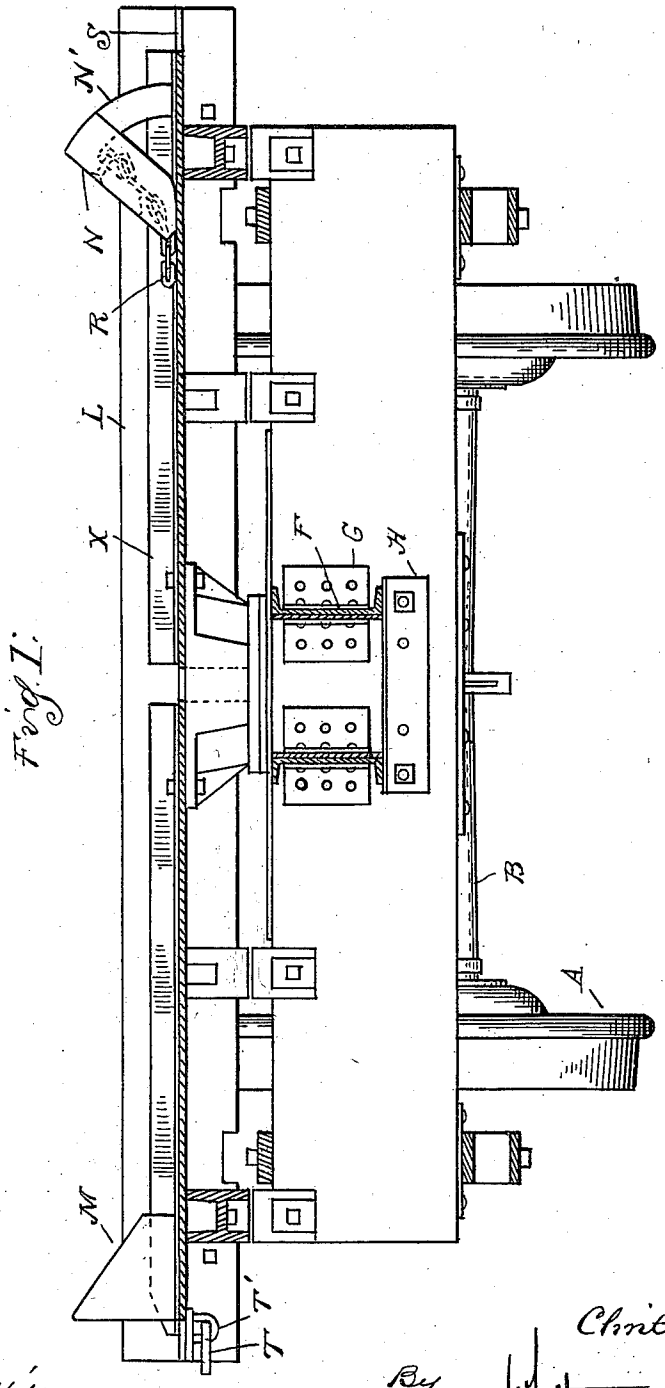

Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

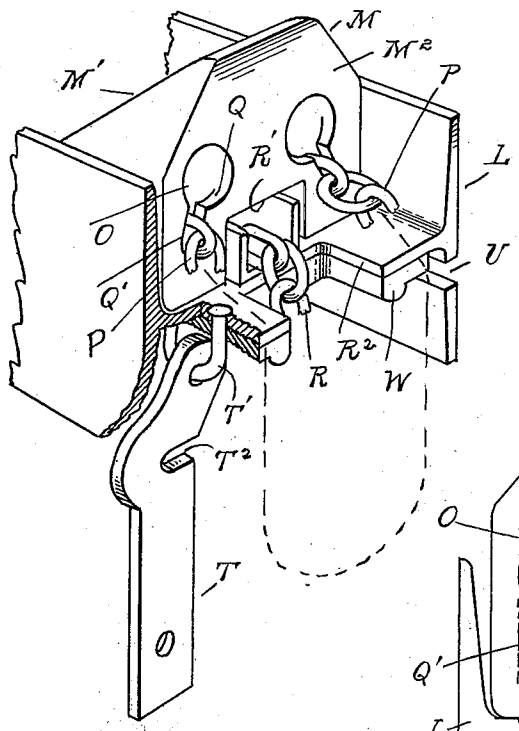
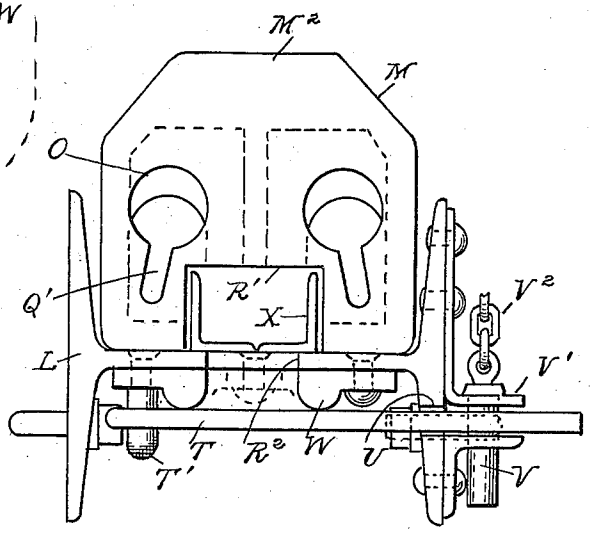


Fig. 3.



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UNITED STATES PATENT OFFICE.

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LOGGING-CAR.

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To all whom it may concern:

Be it known that I, CLINTON W. RUSSELL, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Logging-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to logging cars more particularly designed for use in carrying large timber, and resides in the peculiar construction and arrangement of the bunk and the chocks, in the manner of locking said chocks in relation to the bunk, and further in the peculiar construction, arrangement and combination of parts as will be more fully hereinafter described and particularly pointed out in the claims.

In the drawings—Figure 1 is a sectional end elevation; Fig. 2 is a perspective view of one end of the bunk and chock; and Fig. 3 is an end elevation thereof.

My improved construction is aimed to increase the strength of the bunk and the convenience in arranging the adjustable chocks and their securing chain.

Another feature of my invention is the improved construction of bunk, and in this I have aimed at increased strength of the bunk and convenience in arranging the adjustable "chocks" and their securing chains.

Essentially my improved structure consists of a beam of H-shaped cross section L, the flanges of which are of unusual depth. The channel in the upper portion of the beam is thus of sufficient depth to receive the securing chains for the chocks and to provide the necessary clearance for operating the same beneath the plane of the upper edges of the flanges.

M and N are the chocks for the opposite ends of the bunk and which are adjustable into different positions. These chocks are of different construction, but both are slidably secured within the upper channel of the beam and are supported by the web thereof. The chock M is of substantially triangular shape, having a flat supporting base and the inclined and vertical walls M′ M².

O are apertures arranged upon opposite sides of the center and extending longitudinally through the chock beneath the plane of the upper edge of the bunk flanges.

P are chains secured to the web portion of the bunk and some distance from the end thereof and extending through the apertures O in the chock.

Q are locking flanges for the chains upon the outer wall of the chock and which are slotted at Q′ for engagement with different links to hold the chock M from further outward movement.

The chains P are preferably formed as a continuous loop, having their ends secured and the looped portion extending about the outer wall of the chock M. Thus all danger of losing the chock is avoided, even in case of the accidental unlocking of the chain and disengagement from the bunk, as the loop will hold it in suspension. The chock N at the opposite end of the bunk has secured thereto the operating chain R which extends centrally along the channel in the bunk and through a central recess R′ in the bunk M. This chock N is normally supported in inclined position by a lug N′, which rests upon the web of the bunk, but which is adapted to engage a slot S at the end of said web to permit of dropping below the plane of the upper edges of the bunk flanges. Thus without disengaging this chock from the channel it may be moved from the path of the timber during engagement or disengagement of the same from the bunk.

For locking the chain R, I have provided a simple and easily operated device, and one which cannot become detached from the bunk. This consists of a dog T in the form of a flat plate which is hinged at one end to an eye T′ secured to the web of the bunk L, and at its opposite end is adapted to engage a slot U in the lower flange of the bunk, being thus arranged beneath and parallel to the web of the bunk at the end thereof. For holding it in this position, a draw pin V is arranged to engage with alined apertures in ears V′ secured to the bunk and in the dog T. This pin in turn is secured to a chain V² so as to prevent possibility of its being lost. The dog T is centrally provided with a slot T² for engaging different links of the chain R, which latter drop down through a recess R² in the web of the bunk at the end thereof. Thus the chock N may be adjusted into any desired position by drawing upon the chain R and may then be locked by engaging one of the links in the slot T² of the dog T, and by engaging said dog with the slot U and locking it by

the pin V. A reinforcing plate W is preferably arranged beneath the web of the bunk and between the same and the dog T.

It will be observed that the chains P are arranged upon opposite sides of the channel within the bunk, and the chain R is arranged centrally therebetween. To prevent possibility of fouling of these chains, or interference with each other, they are preferably placed in separate channels and these are formed by arranging flanges, preferably angle bars X above the web and extending longitudinally of the bunk. This will divide the space into three separate channels, the outer ones receiving the chains P and the inner channel receiving the chains R.

With the construction described in operation, before loading the car, the chock N is adjusted into position where the lug N′ drops into the slot S thereby permitting the body of the chock to drop into the channel below the upper edges of the flanges of the beam. Thus these flanges form an unobstructed way in which the timber can be rolled. The chock M is also adjusted before the loading of the car into the desired position, and is locked by dropping the chain into engagement with the slotted flanges Q. After loading the chock N is adjusted to the proper position and locked by engagement of the chain R with the dog T, and the securing of this dog in the slot U by engagement of the pin V with the alined apertures in the ears V′ and dog.

What I claim as my invention is:

1. In a logging car, a bunk formed by a beam of H-shaped cross section, a chock resting upon said beam and adjustable longitudinally thereon, and a chain for securing said chock arranged in the open channel of said beam above said web, the flanges of said beam being of sufficient depth to provide clearance for said chain in said channel.

2. In a logging car, a bunk comprising a beam of H-shaped cross section, a chock resting on said beam, and a pair of chains for securing said chock extending within the channel of said beam on opposite sides thereof, being secured to said beam and having a locking engagement with said chock.

3. In a logging car, a bunk comprising a beam of H-shaped cross section, a pair of chocks adjustably supported upon said beam and chains for securing said chocks extending parallel to each other along the web of said beam and in the open channel formed between the upwardly extending flanges of the beam.

4. In a logging car, a bunk comprising a beam having an upwardly opening channel, a pair of chocks supported on said beam within said channel, a pair of chains secured to said beam and having a locking engagement with opposite sides of one of said chocks, and a chain for the other chock extending parallel to and in between said first-mentioned chains and through a central aperture in said first-mentioned chock.

5. In a logging car, a bunk comprising a beam having an upwardly-opening channel, a pair of chocks supported upon adjustable along the beam, chains for securing said chocks, extending parallel to each other within the channel of the beam, and a flange secured to the web of said beam dividing the channel into separate ways for the respective chains.

6. In a logging car, a bunk comprising a beam having an upwardly-opening channel, a pair of chocks supported on said beam, and adjustable therein, chains for securing said chocks and a flange secured to said beam dividing the space within said channel into separate ways for said chains, said flange being of lesser height than the flanges of the other channel.

7. In a logging car, a bunk comprising a beam having an upwardly-opening channel, a pair of chocks supported on said beam, a pair of chains for one of said chocks arranged upon opposite sides of the channel, a chain for the other chock arranged centrally between the first mentioned chains, and a pair of flanges projecting upward from the web of said beam dividing the space into separate ways for the several chains.

8. In a logging car, the combination with a beam having an upwardly-opening channel, of a chock adjustably supported upon said beam and a loop chain having its ends secured to said beam and the loop embracing said chock and the opposite sides of said loop having an adjustable locking engagement with said chock.

9. In a logging car, the combination with a bunk comprising a beam having an upwardly-opening channel, of a chock adjustably supported upon said beam, a loop chain having parallel portions passing through apertures on opposite sides of the center of said chock with their ends secured to said beam, the length of said loop being sufficient to permit of endwise disengagement of said chock from the channel in said beam.

10. In a logging car, the combination with a bunk, comprising a beam having an upwardly-opening channel, of a pair of chocks adjustably supported upon said beam, a pair of chains for securing one of said chocks arranged upon opposite sides of said channel, a chain for the other chock extending between said first-mentioned chains and through an aperture in the first-mentioned chock to the end of the bunk, and means for locking said last-mentioned chain to the end of said bunk.

11. The combination with the bunk, provided with a transverse web and adjustable chock, of an adjusting chain for said chock

extending to the end of said bunk, and a locking device for said chain comprising a hinged dog detachably engaging a slot in the end of said bunk and extending beneath the web thereof, and a vertically-arranged coupling pin for locking said dog in engagement with said slot.

12. In a logging car, the combination with the bunk comprising a beam, of a chock, a chain for adjusting and securing said chock extending to the end of the beam, a dog secured to said beam and provided intermediate its ends with a portion for engaging said chain, a bearing on said beam with which said dog is adapted to engage, and means for locking said dog to the bearing.

13. In a logging car, the combination with the bunk comprising a beam, of a chock, a chain for adjusting and securing said chock extending to the end of the beam, a dog secured to one side of the beam and provided intermediate its ends with a portion for engaging said chain, said bunk having a slot therein with which the free end of the dog is adapted to engage, and means for locking said dog within the slot.

14. In a logging car, the combination with a bunk comprising a beam, of a chock slidably engaging said beam having an aperture extending therethrough and provided with a slot, a chain arranged within said aperture and adapted to have a locking engagement with the slot.

15. In a logging car, the combination with a bunk comprising a beam, of a chock slidably engaging said beam, and a chain for securing said chock having an adjustable locking engagement with the same.

16. In a logging car, the combination with a bunk comprising a beam, of a chock slidably engaging said beam, and a chain for securing said chock connected to the bunk and extending through and having an adjustable locking engagement with the chock.

17. In a logging car, a bunk comprising a beam having an upwardly-opening channel, said channel being divided into a plurality of separate ways, a pair of chocks supported upon the beam, and chains for securing said chocks, extending within the channel of the beam and positioned in the separate ways thereof.

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

CLINTON W. RUSSELL.

Witnesses:

NELLIE KINSELLA,

W. J. BELKNAP.