J. M. MEANY.

BUNK FOR LOGGING CARS.

APPLICATION FILED FEB. 13, 1920.

1,360,002. **Patented Nov. 23, 1920.**

2 SHEETS—SHEET 1.

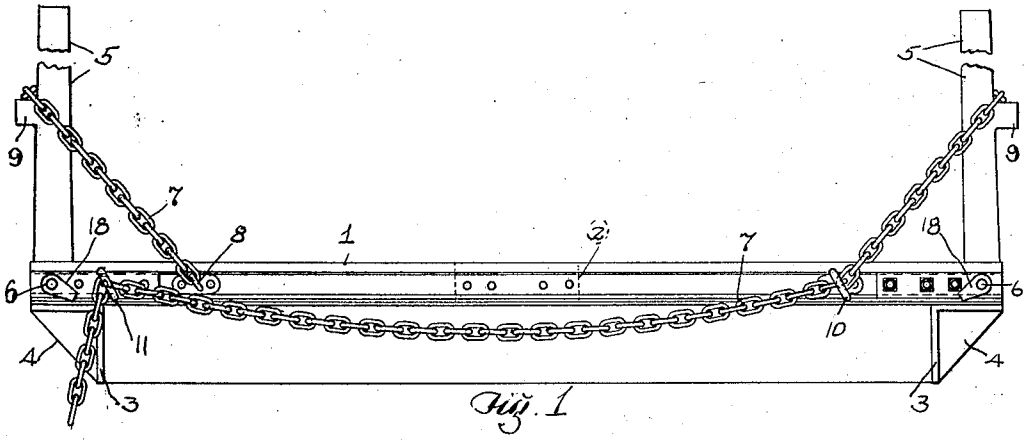


Fig. 1

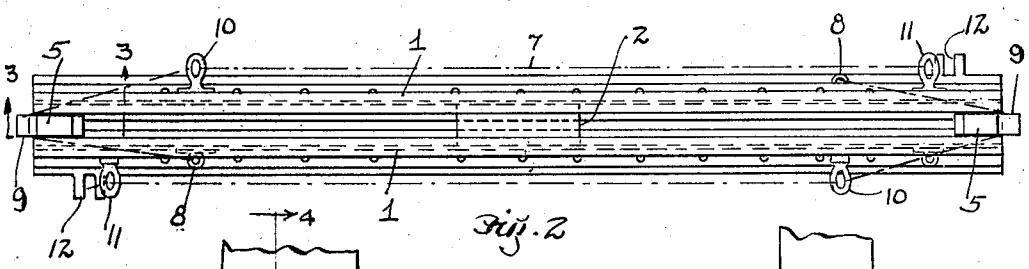


Fig. 2

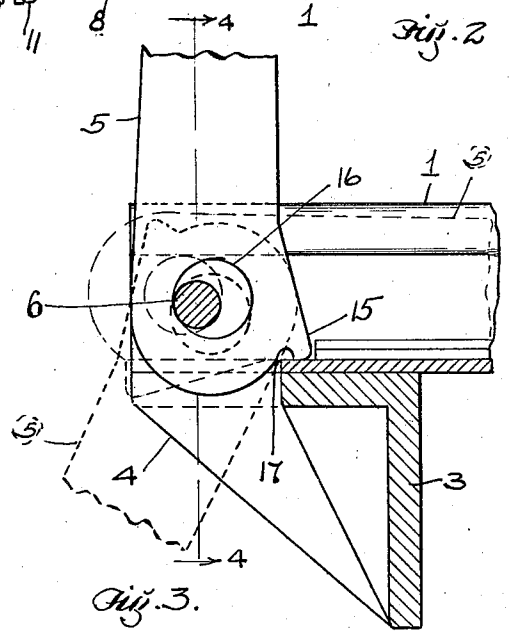


Fig. 3.

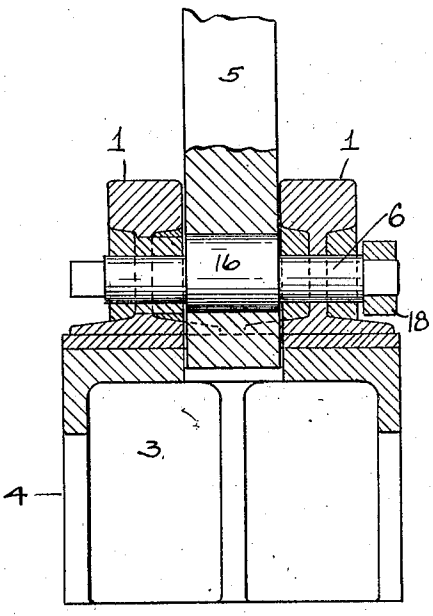


Fig. 4

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2 SHEETS—SHEET 2.

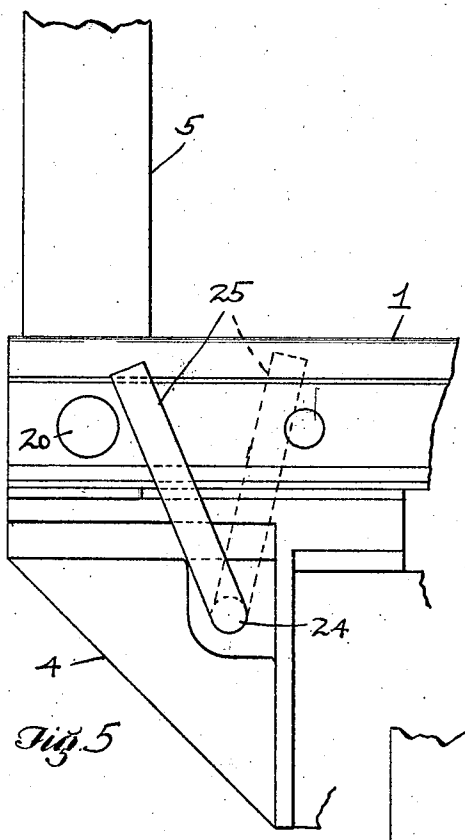


Fig. 5

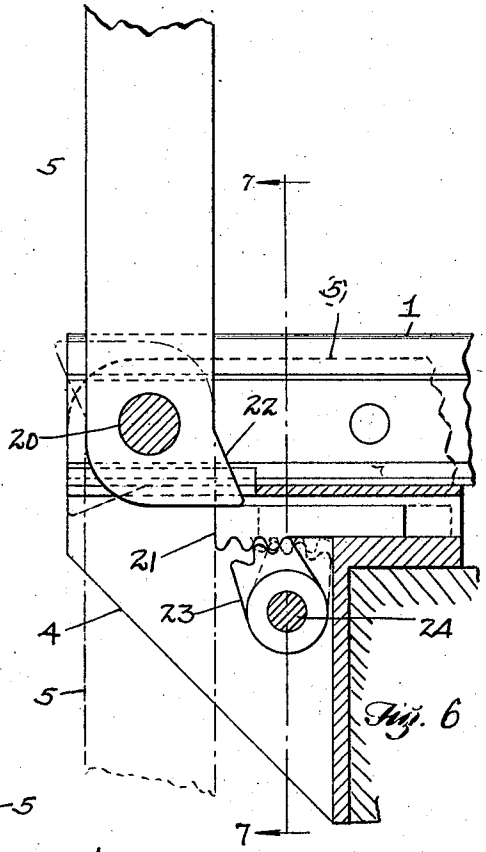


Fig. 6

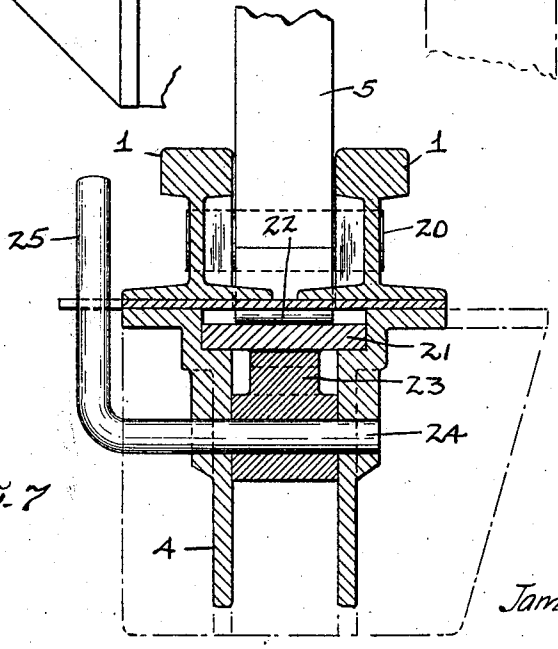


Fig. 7

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UNITED STATES PATENT OFFICE.

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BUNK FOR LOGGING-CARS.

1,360,002. Specification of Letters Patent. Patented Nov. 23, 1920.

Application filed February 13, 1920. Serial No. 358,518.

To all whom it may concern:

Be it known that I, JAMES M. MEANY, a citizen of the United States, and a resident of Portland, county of Multnomah, and State of Oregon, have invented a new and useful Improvement in Bunks for Logging-Cars, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

As is well known, it is desirable in handling logs on flat cars, and in other similar connections, to provide stakes along the sides of the cars in order to prevent the logs from rolling off when stacked up in a pile. It is of course necessary that such stakes be movable so as to clear the sides of the car when it is desired to roll the logs off, and in order to secure full capacity in loading the stakes require to be relatively high. In order, however, to adapt a car, equipped with stakes otherwise satisfactory, for use with loading machines or traveling derricks of the type such as the McGiffert loader, which straddle the track when in operation, empty cars being successively advanced through and beneath such loader, stakes of the kind in question can neither project upwardly nor depend downwardly without interfering with such loader.

The object of the present invention, accordingly, is to provide an improved bunk or bunker for logging cars that has stakes which may be folded up after the fashion of a jack-knife when not in use, that may be readily dropped out of the way when unloading, and that otherwise fulfil the requirements indicated above. To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims, the annexed drawings and the following description setting forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings:—

Figure 1 is a front elevation of one form of my improved bunk, as it appears looking at a car endwise thereof; Fig. 2 is a plan view of the same; Fig. 3 is a sectional view on a somewhat larger scale of a detail thereof, taken on the plane indicated by the line 3—3, Fig. 2; Fig. 4 is a section of the same detail, taken at right angles to that of Fig. 3, as indicated by the line 4—4 thereon; Fig. 5 is a side elevation on the same larger scale of one end of a modified form of construction of my improved bunk; Fig. 6 is a sectional view similar to that of Fig. 3, but showing such modified construction; and Fig. 7 is a section at right angles to that of Fig. 6, as indicated by the line 7—7 thereon.

The car upon which my improved bunk is designed to be installed is not shown, but it will be understood to be an ordinary logging or flat car, the bunk in question resting on the floor or deck of the car. The bunk or bunker proper comprises two pieces of standard railroad iron or rails, which are securely bolted or otherwise secured together in spaced relation, as shown in Figs. 2 and 4, a spacing block 2 being interposed for this purpose midway between the ends of said rails. The latter are of sufficient length to overhang the sides of the car deck by the width of the brackets 3 which are respectively secured to such sides and serve to support the corresponding extremities of the rails. As shown in Figs. 1 and 3, these brackets have outer guide faces 4, which incline upwardly and terminate flush with the rail ends in question, the result being that when a log is being raised, by a derrick or otherwise, from the track level onto a car, it will readily slide past the ends of the rails without being caught thereby. The brackets 3 also serve to secure the bunkers in place longitudinally of the car deck, there being at least two, and ordinarily four, bunks employed to a car.

Between the rails 1, immediately adjacent their respective ends, are pivotally secured stakes 5 by means of pins 6 that pass through such rail ends and the lower ends of such stakes. The stakes are somewhat less in length than half the length of the rails, so as to clear block 2 when they are dropped into closed or inoperative position between the rails. The stakes are not only free to drop into the position just described, from their normal upstanding or operative position, as shown in Fig. 1, but also to swing outwardly into depending vertical position, as shown in Fig. 3, so as to permit the logs resting on the bunker to roll off. For the purpose of retaining the stakes against such movement outwardly, two chains 7, 7 are employed, each being secured at its one end to a ring 8

on the side of one of the rails 1, thence passing around the adjacent stake 5 above a projection or shoulder 9 thereon, back through a ring 10 opposite ring 8, across to and through a second ring 11 at the other end of the bunk, and thence through a suitable hook or notch 12, whereby the free end of the chain is securely held. Upon releasing such free end of either chain, the corresponding stake 5 will be free to drop outwardly and downwardly, thus clearing the corresponding side of the car for removal of the logs supported on the bunks.

In order to retain the stakes against inward turning movement from the upstanding position, in which it has just been indicated the chains 7 are adapted to retain same, I provide means that coöperate with the lower end of each stake to prevent such rotation when desired. In the first constructional form, as shown in Figs. 3 and 4, the lower end of the stake is provided with a lip, or rather toe, 15, and the pin 6 upon which the stake is mounted is formed with an eccentric 16, so that by rotation of such eccentric the stake end in question may be shifted longitudinally of the rails 1 so as to cause said toe to engage a ledge 17 formed by the bracket member 4. Thus, as shown in Fig. 3, the stake end has been shifted inwardly to cause the toe 15 to engage with said ledge, but upon rotation of pin 6 in a counter-clockwise direction, such end will be shifted outwardly far enough to cause the toe to clear the ledge, as will be readily understood. To facilitate rotation of the pins 6, they are provided with levers 18, as best shown in Fig. 1.

Instead of thus shifting the lower end of the stake so as to engage with the ledge on member 4 or not, as desired, I may mount the stake on a fixed pivot pin 20, as shown in Figs. 5, 6 and 7, and employ a slidable plate 21 in place of the fixed ledge 17, such plate being adapted in one position to engage with the toe 22 on the stake, and in another position to clear such toe. In order to adjust the position of plate 21 as desired, I further provide a rotatable member 23, on the order of a segmental gear, that has toothed engagement with the plate, said member 23 being mounted on a shaft 24 journaled in corresponding bracket 4 and provided with a handle 25 for convenience of operation.

The general mode of operation of my improved bunker is the same in both forms of construction; thus when desired to load logs on the car, the stakes 5 are secured in their upstanding position by appropriate operation of the eccentric pins 6 or of the plate 21 so as to prevent inward rotative movement of said stakes, while the chains 7 are passed around the projections 9 on said stakes to prevent them from swinging outwardly. When it comes to unloading, as previously explained, one or the other of the chains 7 is released so as to allow the corresponding stake thus to swing outwardly. When the stakes are not in use they are swung inwardly so as to fold up like the blades of a jack-knife between the rails composing the bunker, in which position they are entirely out of the way and cannot interfere with the loading machine or any other obstruction adjacent the track.

By reason of my improved construction, stakes substantially equal to half the width of the car may be employed, which is much longer than has heretofore been found practicable. At the same time a very strong and substantial mounting for the stake is provided, reducing to a minimum the danger of logs unintentionally rolling from the car.

Other modes of applying the principle of my invention may be employed instead of the ones explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. In mechanism of the character described, the combination of a suitable bunker, a stake pivotally attached to said bunker adjacent one end thereof, said stake being normally freely rotatable from an upstanding position outwardly about its axis to depend vertically from said bunker or inwardly to a horizontal position as desired, and a member on said bunker, said member and stake being relatively shiftable in a horizontal direction to interengage and thus prevent inward rotation of said stake beyond such upstanding position.

2. In mechanism of the character described, the combination of a suitable bunker, a stake pivotally attached to said bunker adjacent one end thereof, said stake being normally freely rotatable from an upstanding position outwardly about its axis to depend vertically from said bunker or inwardly to lie in a horizontal position as desired, and a slidable member on said bunker adapted to engage with said stake to prevent inward rotation thereof beyond such upstanding position.

3. In mechanism of the character described, the combination of a rail forming a bunker, a stake pivotally attached to said rail adjacent one end thereof, said stake being normally freely rotatable from an upstanding position outwardly about its axis to depend vertically from said rail or inwardly to lie alongside the same as desired, a toe on the lower end of said stake, and a plate slidable along said rail and adapted to engage said toe and thus prevent inward ro-

tation of said stake beyond such upstanding position.

4. In mechanism of the character described, the combination of a rail forming a bunker, a stake pivotally attached to said rail adjacent one end thereof, said stake being normally freely rotatable from an upstanding position outwardly about its axis to depend vertically from said rail or inwardly to lie alongside the same as desired, a toe on the lower end of said stake, a plate slidable along said rail and adapted to engage said toe and thus prevent inward rotation of said stake beyond such upstanding position, and a rotatable member having toothed engagement with said plate for operating the same.

Signed by me this 7th day of February, 1920.

JAMES M. MEANY.