

P. NIKOLAI.
 CAR STAKE POCKET.
 APPLICATION FILED JULY 24, 1915.

Patented Sept. 28, 1915.
 2 SHEETS—SHEET 1.

1,154,719.

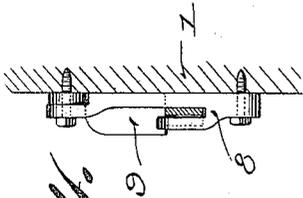


Fig. 4.

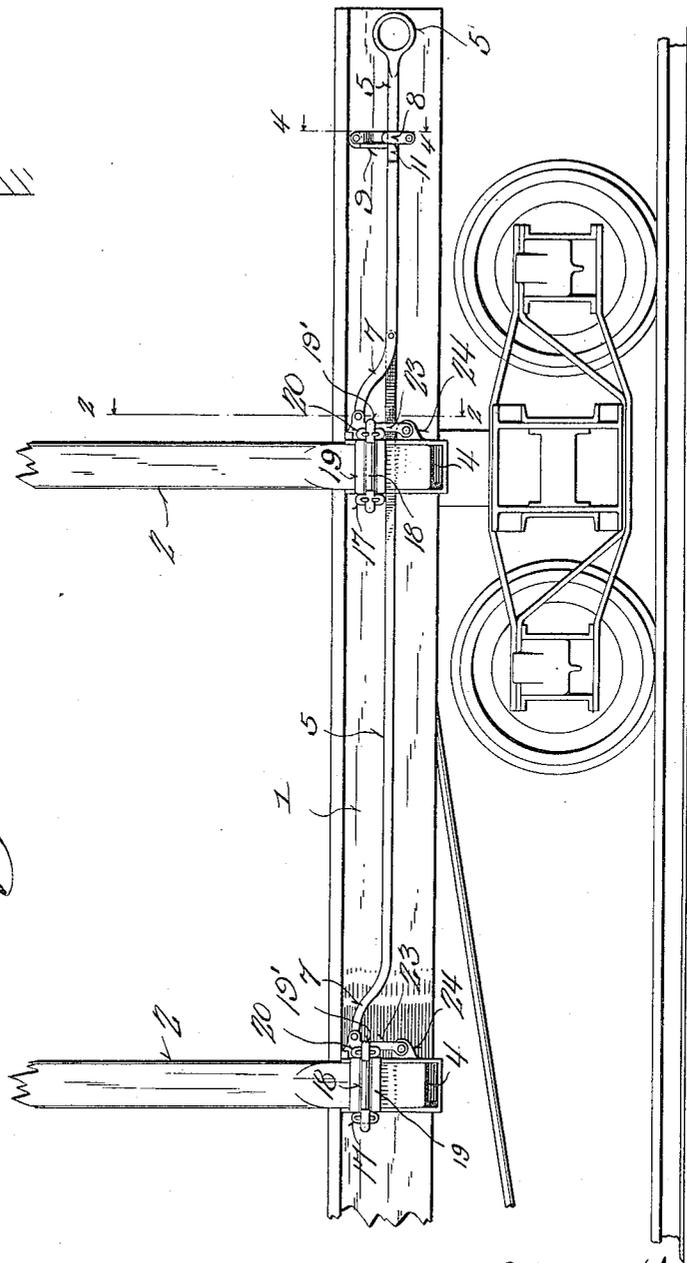


Fig. 1.

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1,154,719.

Fig. 3.

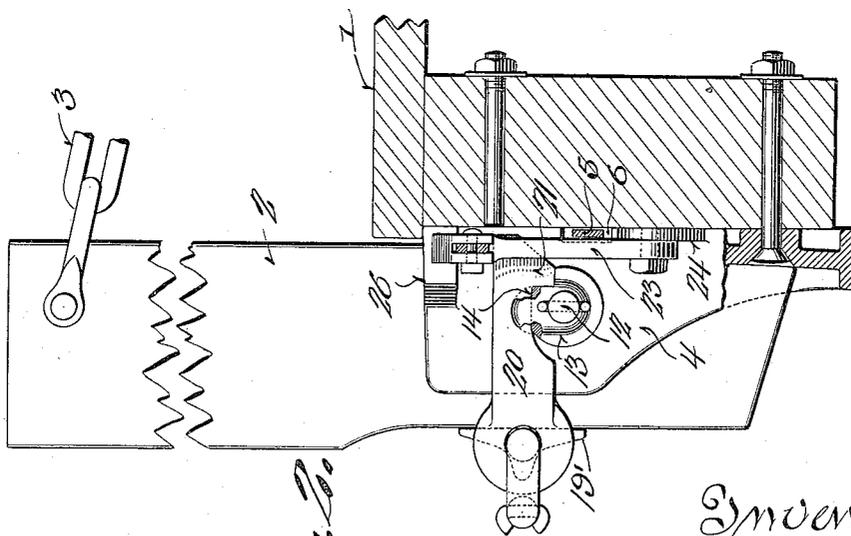
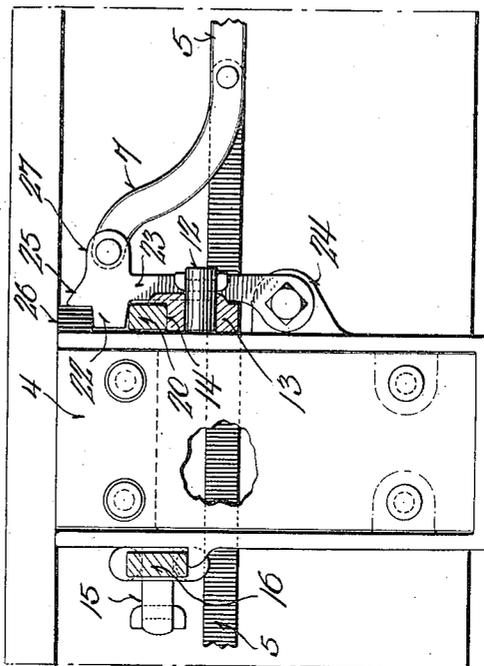


Fig. 2.

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UNITED STATES PATENT OFFICE.

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CAR-STAKE POCKET.

1,154,719.

Specification of Letters Patent.

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Application filed July 24, 1915. Serial No. 41,622.

To all whom it may concern:

Be it known that I, PETER NIKOLAI, a citizen of the United State, and resident of Mellen, in the county of Ashland and State of Wisconsin, have invented certain new and useful Improvements in Car-Stake Pockets; and I do declare that the following is a full, clear, and exact description thereof.

This invention relates to the subject of logging and similar types of cars, and has more particular relation to pockets for stakes used in connection with such cars.

The primary aim of the invention is to provide pockets for logging and similar cars that are connected with means whereby the pockets are caused to release the stakes and thereby permit the load to be discharged, the mechanism being manually controlled and so located that the operator may be stationed in a position whereby he will not be in danger of being injured by the discharging load, and the mechanism being of such a nature that all, or a portion of all, stakes at one side of the car may be simultaneously released from their pockets.

In producing an invention capable of performing the functions generally stated above, it will be understood, of course, that the essential features of the same are susceptible to changes in details and structural arrangements, one simple and thoroughly practical embodiment of the same being shown in the accompanying drawings, wherein—

Figure 1 is a fragmentary view in side elevation of a logging car equipped with the improved stake pockets and the releasing mechanism for said pockets. Fig. 2 is a vertical sectional view taken on the line 2—2, Fig. 1. Fig. 3 is a detail view in side elevation of a pocket, parts thereof being shown in section. Fig. 4 is a detail sectional view taken on the line 4—4, Fig. 1.

Referring to the accompanying drawings by numerals, 1 designates a car, shown conventionally, and being equipped with side pockets, as usual for the reception of stakes 2, the stakes being adapted for the reception of chains 3 or other types of load binders. The pockets 4 are open in front and are bolted or otherwise fastened to the side of the car. The pockets 4 may be arranged in sets of two each as is usual, or in any other convenient or desirable form. However, for convenience in illustration the pockets have been arranged in sets of two, and the mecha-

nism for controlling the same has been shown coupled and connected to both pockets so that both pockets may be caused to simultaneously release their stakes.

The stakes are normally held in the pockets by locking mechanism, to be described, such mechanism being operated and controlled by a lever 5 that extends from one end of the car at which point it is equipped with a hand-grip 5', to the farthestmost pocket of the set, the lever passing behind the nearest pocket through a suitable passage 6 formed between the car and the pocket. Adjacent the hand-grip, lever 5 has a branch 7 that connects with the nearest pocket, this arrangement permitting both pockets to be simultaneously operated. Adjacent the end of the car, lever 7 normally lies in a rest 8 in the form of a keeper, as shown in detail in Fig. 4 of the drawing and is held therein against a lifting movement by means of a latch 9 pivoted to the upper portion of the rest and having its free portion disposed so that by swinging the latch downward, said free portion will bear upon and thereby hold the lever within the keeper. A lug 11 carried by the lever 5 is adapted to abut the keeper 8 to prevent outward longitudinal movement of the said lever.

The pockets 4 are duplicates as well as their stake holding or locking means, each having a pivot bolt 12 projecting laterally from side and having mounted thereon a holding cam 13 equipped with a latching shoulder 14. At the opposite side, the pockets are each provided with a pivot bolt 15 to which an arm 16 is swiveled, the arm normally projecting outwardly beyond the pocket and having a swivel engagement 17 with one end of a shaft 18 having a clamping plate 19, cast or otherwise formed integral therewith, and normally extending across the open front of the pocket 4 to lock a stake within said pocket. The opposite end of shaft 18 has a swiveled engagement 19' with a latching arm 20, the free end of arm 20 being in the form of a hook 21 that normally engages the shoulder 14 of holding cam 13. Arm 20 and the holding cam 13 are normally held in the described interlocked engagement by means of the lip 22 that projects laterally from the free end portion of a locking lever 23 that is pivoted to an ear 24 carried by the base portion of the pocket. The upper, or free portion of

lever 23 is provided with a shoulder 25 that abuts a lug 26 carried by the pocket 4, when the lip 22 is in engagement with arm 20, as shown in Fig. 3 of the drawings. Locking lever 23 has rearwardly projecting pivot ears 27, and such ears 27 are in pivotal engagement with either the lever 5 or its branch 7. It is preferred that the shaft 18 and plate 19 be integrally cast, with the ends of said shaft projecting laterally beyond the ends of the plate 19. The swivel connections between the shaft and the latching arm 20 and the arm 16 is preferably formed by angularly bending the ends of shaft 18 to substantially hook shape, and engaging said hooked shape ends with eyes formed in the outer ends of said arms 16 and 20.

From the foregoing description it will be apparent that by releasing lever 5 from the keeper 8, as described, and pulling rearward on said lever, the locking lever 23 is released from arm 20, whereupon the weight of said arm 20, and plate 19, together with the pressure of the stake clamped in said pocket by said plate, causes an outward pull on cam 13 that rotates said cam and causes the arm 20 to be released therefrom, whereupon, through the described swiveled connections between arms 16 and 20 and plate 19, such plate falls away from the pocket, thereby freeing the stakes, it being understood, of course, that the release of the stakes is facilitated by reason of the rear of the pockets being inclined as usual.

I claim:—

1. In combination with a car provided with stake pockets, stake clamping plates for the pockets, means for locking the plates in clamping positions, and a hand operated lever equipped with a branch, the lever and branch having operating connections with the plate holding means.

2. In combination with a stake pocket provided with stake holding means, a lever for operating the stake holding means, a rest for the free portion of the lever, means carried by the lever and engaging the rest to prevent longitudinal movement of the lever in one

direction, and means carried by the rest and engaging the lever to normally prevent vertical movement of the lever in one direction.

3. In combination with a stake pocket, a pivot bolt extending laterally from one side thereof, a holding cam mounted on the pivot and provided with a shoulder, an arm swiveled to the opposite side of the pocket, a clamping plate swiveled to the outer end of said arm and normally extending across the front of the pocket, a latching arm swiveled to the plate, and provided with an end hook for engaging the shoulder of the cam, means for holding the latching arm in engagement with the cam, and a hand operated lever for releasing said holding means.

4. In combination with a stake pocket, a clamping plate having a swiveled connection with one side of said pocket, a holding cam carried by the other side of the pocket, a latching arm carried by the plate and engaging the cam, means engaging the latching arm for locking the cam and arm in engagement, and a hand lever for releasing the locking means.

5. In combination with a car provided with stake pockets, the pockets being arranged in pairs and provided with stake holding means, one of the pockets being so disposed relative to the car that a passage is formed between said pocket and said car, a hand lever carried by the car and extending through said passage and being connected to and adapted to release the stake holding mechanism of one of the pockets, and a branch extension from said lever connected to and adapted to operate the stake holding mechanism of the other pocket.

In testimony that I claim the foregoing I have hereunto set my hand at Mellen, in the county of Ashland and State of Wisconsin, in the presence of two witnesses.

PETER NIKOLAI.

Witnesses:

C. P. PECK,

C. F. PETERSON.