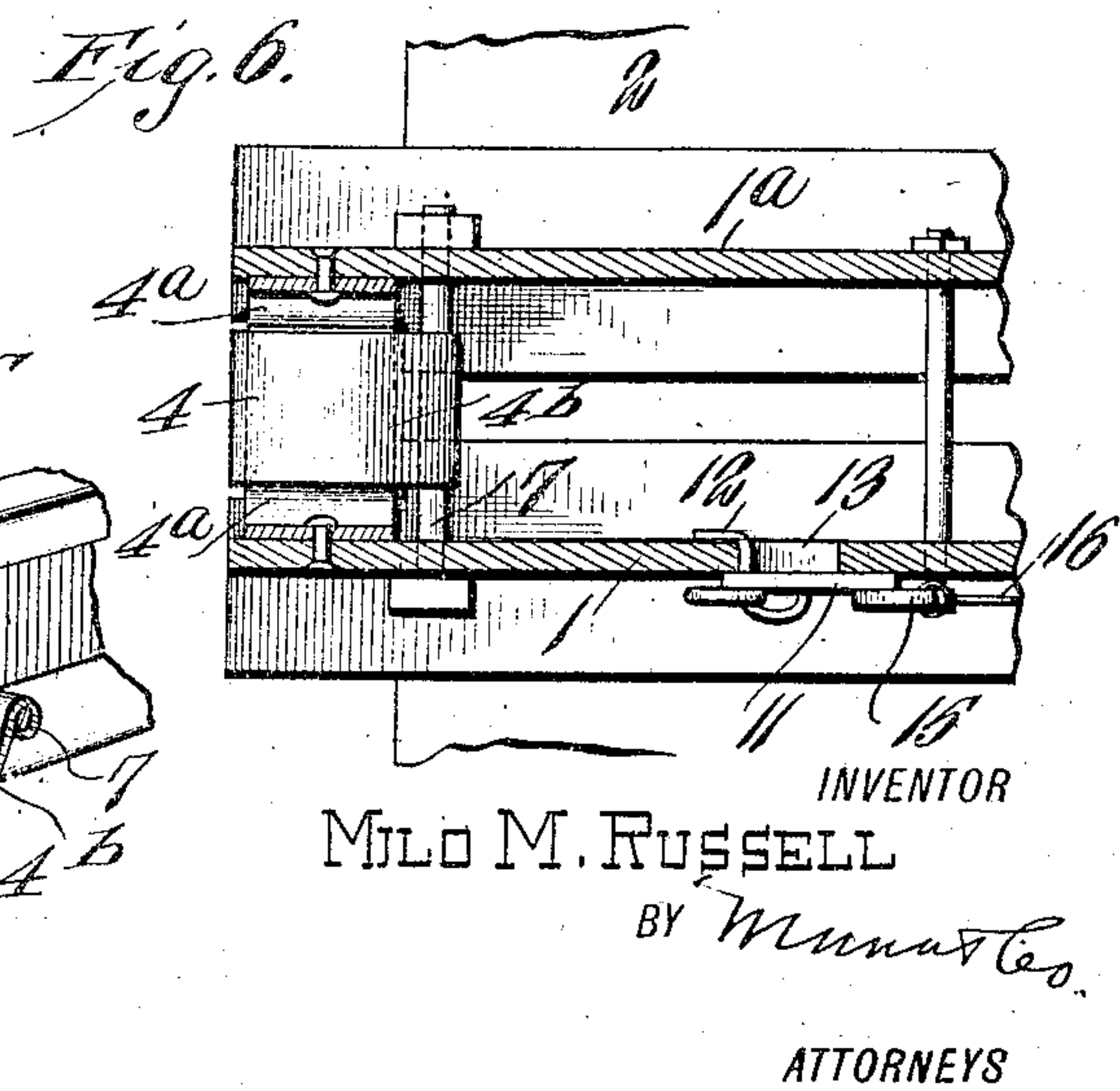
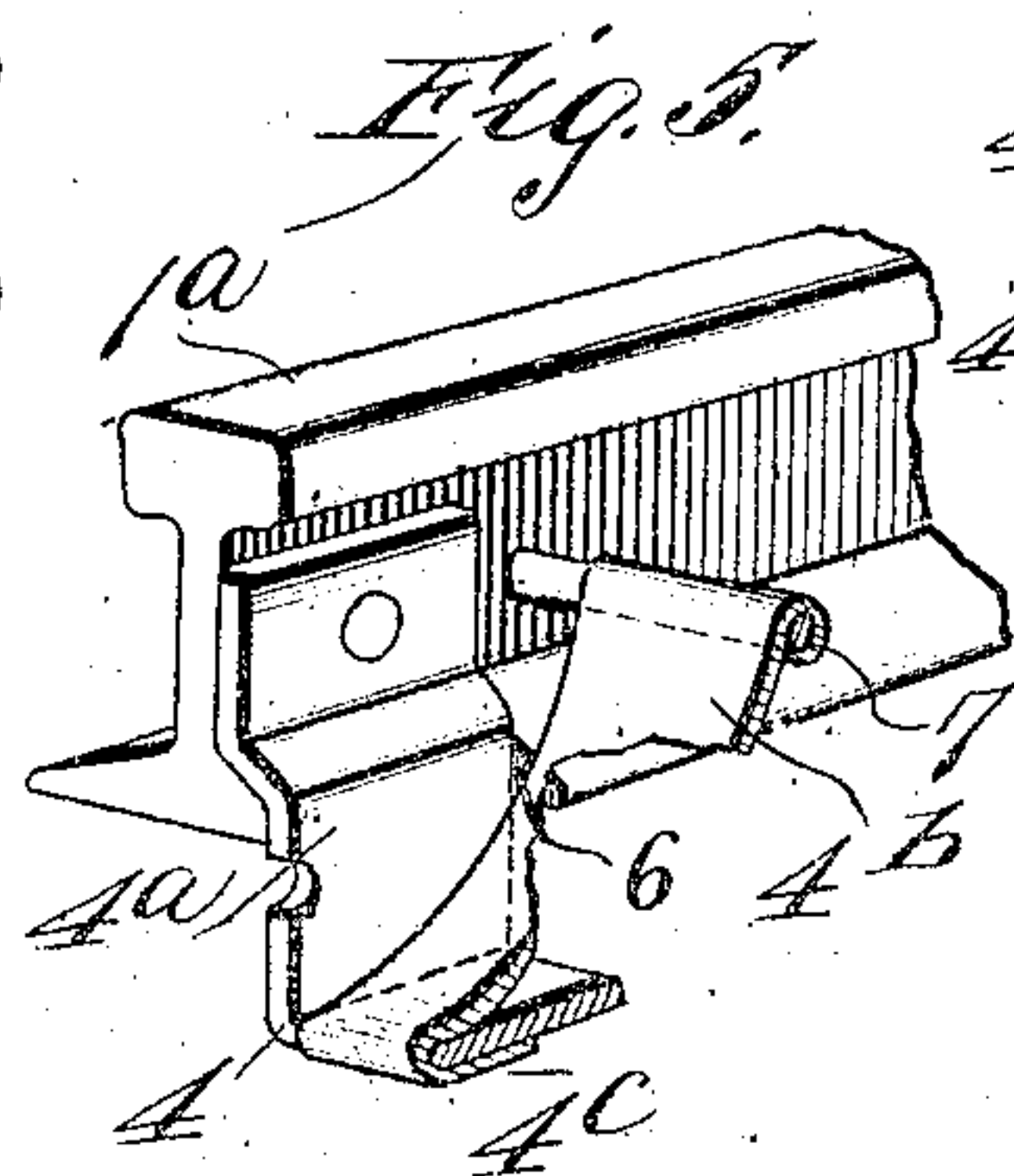
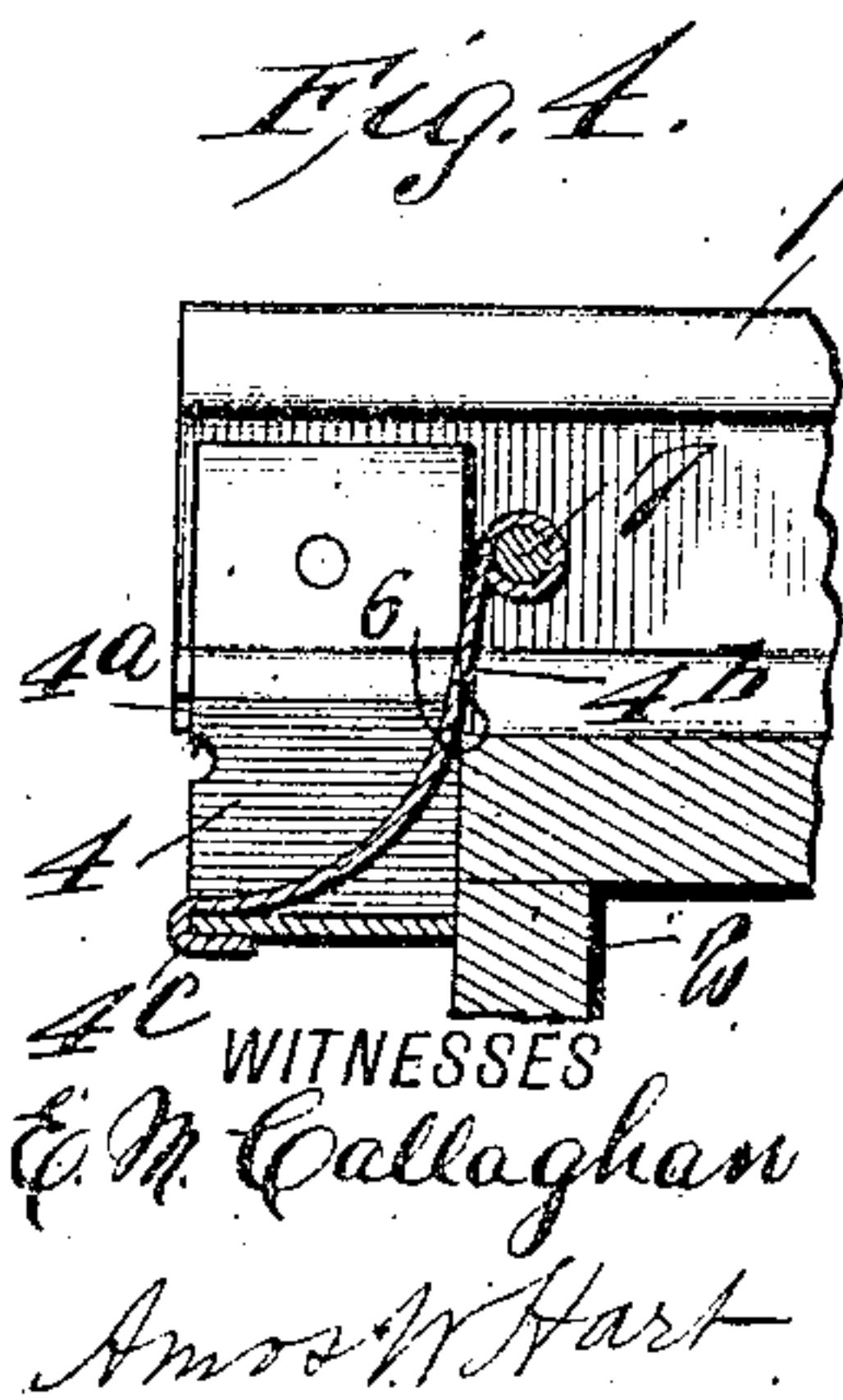
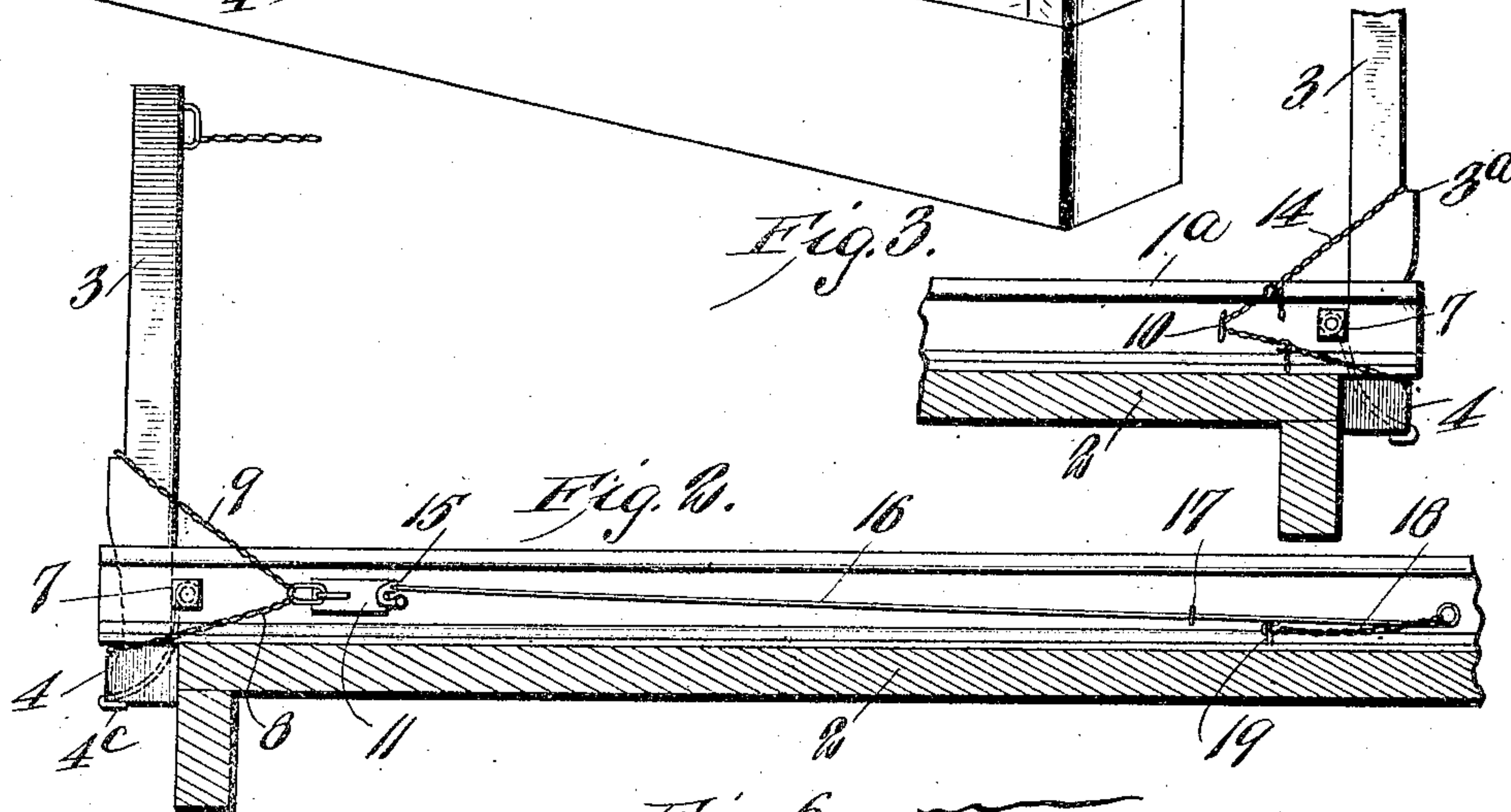
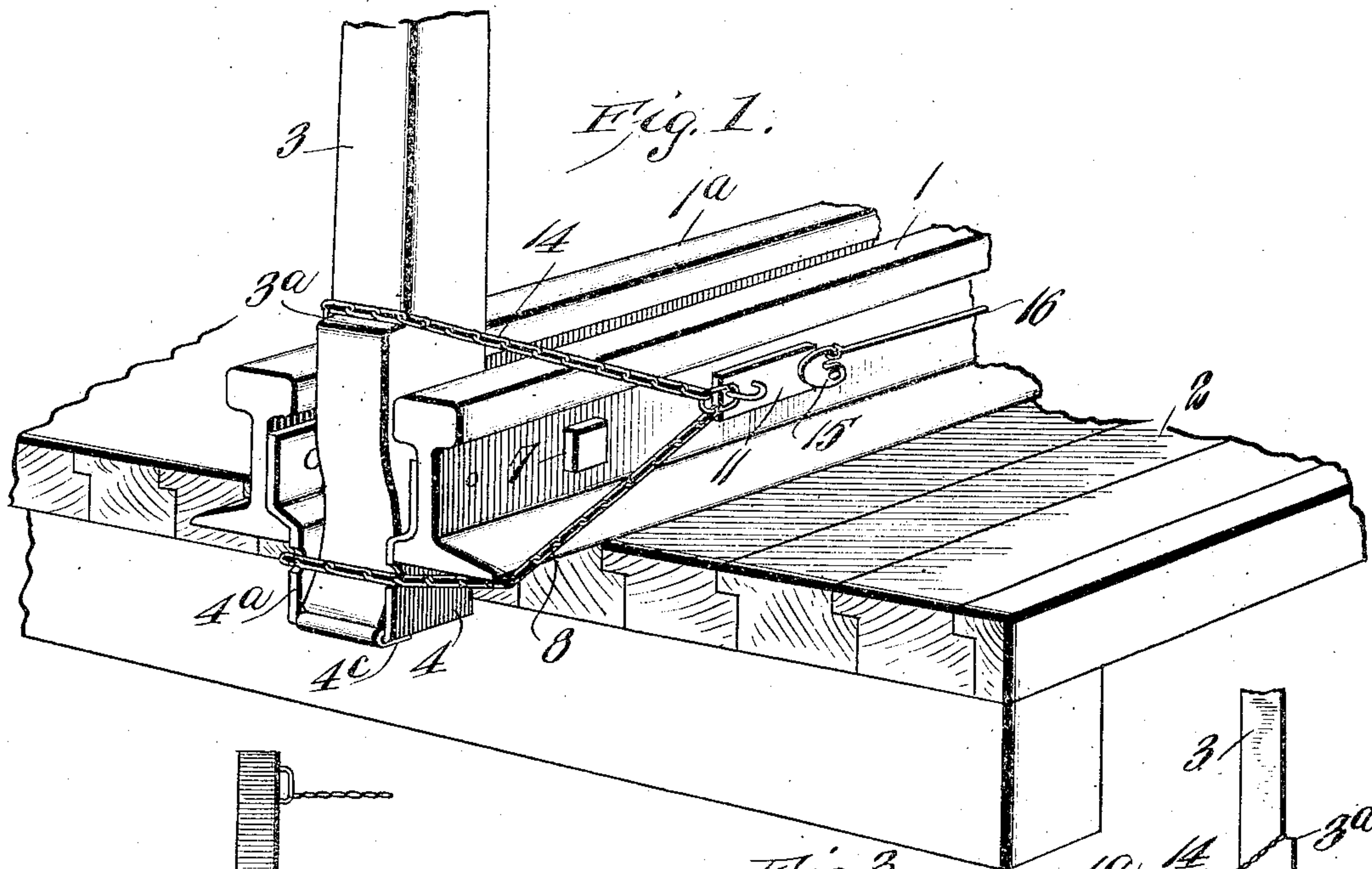


M. M. RUSSELL.
LOG AND LUMBER CAR.
APPLICATION FILED JAN. 28, 1909.

934,362.

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UNITED STATES PATENT OFFICE.

MILO M. RUSSELL, OF EAU CLAIRE, WISCONSIN.

LOG AND LUMBER CAR.

934,362.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed January 28, 1909. Serial No. 474,700.

To all whom it may concern:

Be it known that I, MILO M. RUSSELL, a citizen of the United States, and a resident of Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented certain Improvements in Log and Lumber Cars, of which the following is a specification.

Flat cars for transporting logs or lumber are commonly provided with raised, transverse bars or timbers called "bunks" whereon the load rests, and also with removable side stakes or standards, which are supported in sockets arranged at the ends of the bunks and overhanging the base or platform of the car. I have devised and put in successful practical use an improvement in this line, comprising a novel stake socket which is attached to bunks formed of parallel bars, consisting preferably of railroad rails, and provided with a double chain attachment adapted to hold a stake firmly when in use and to release it quickly, and safely for the operator.

The details of construction, combination and operation of the parts embodying my invention are as hereinafter described, and illustrated in the accompanying drawing in which—

Figure 1 is a perspective view of a portion of a log car provided with my improvement. Fig. 2 is a transverse vertical section of a car body or platform, with a portion of my improved apparatus shown in side elevation. Fig. 3 is a similar section, the opposite side of the apparatus being shown in elevation. Fig. 4 is a vertical transverse section taken midway between the two bars or rails comprising the bunk proper. Fig. 5 is a sectional perspective illustrating particularly the arrangement of the stake socket with relation to the bars or rails comprising the bunk proper. Fig. 6 is a horizontal section taken through the middle of the bunk.

I construct the bunk of two railroad rails 1, 1^a which are arranged parallel transversely of the car base or platform 2, and their ends overhanging the sides of the latter as shown. A stake 3, whose lower end is rounded on the inner side, is supported in a socket 4 which lies between, and is attached to, such projecting ends of the rails. This socket is formed of two plates indicated by 4^a and 4^b; see especially Figs. 1, 4, 5. The plate 4^a is bent into nearly U-form and its ends riveted or bolted to the webs of the rails, the body of

the same hanging below the rails as shown. The side portions of plate 4^a are bent laterally to accommodate them to the rails, and the bases of the rails are cut away as shown in Fig. 5, so that said plate 4^a abuts, or is in contact with, the shoulder 6 of the rail bases. The other plate 4^b is provided with a hook 4^c which engages the front edge and middle portion of the plate 4^a, and is curved backward and extended upward, and attached to a rod 7 which passes through the webs of the rails. The stake is adapted to rest on, and conforms in shape to, the curve of plate 4^b, as indicated by dotted lines Fig. 2. The stake is held detachably in the socket thus constructed, by means of chains 8 and 9. The chain 8 is attached at 10 to the outer side of rail 1^a, see Fig. 3, and passes around the lower portion of the socket 4 and is attached to a plate 11 having a hook 12, as shown in Fig. 6, which is adapted to pass through a slot 13 in rail 1 and engage the edge of the same. It will be observed that the chain 8 passes down over the bases of the rails as shown in Figs. 1, 2, 3, and engages notches 4^a formed in the front edge of the socket plate 4^a. By this means, when this chain is tightened, it is prevented from slipping up or down. The chain may be shortened or lengthened by means of a hook arranged as shown in Fig. 3. Another chain 14 is attached to the side of rail 1^a at the point 10, Fig. 3, and passes around the stake above its shoulder 3^a, and is connected to the hook plate 11 in the same manner as the chain 8 before described. This chain 14 may also be lengthened or shortened as required, by means of a hook shown in Fig. 3. When the hook plate is held in the position shown in Figs. 1, 2, 6, the two chains 8 and 14 are drawn taut and the stake 3 is held vertical in the position required for use, and it cannot escape from the socket 4 until the chain is released. It is necessary to lock the plate 11 in the position indicated, and for this purpose I employ a pivoted catch or cam 15 which is operated by a rod 16, as shown in Fig. 2, the same extending along the web of rail 1 and near to the opposite side of the car platform 2. It is held in a keeper provided at 17, and a chain 18 provided with a hook is attached to its ring-shaped end for holding the catch 15 in the locking position shown in Figs. 1, 2, 6. By disengaging the chain 18 from the staple 19, and, the rod 16 being pulled, the catch 15 will release the

hook plate 11, so that it is instantly detached from the rail 1, with the result that the chains 8 and 14 in turn release the stake 3, which then flies outwardly or laterally, owing to the pressure of the load against it. Thus, while the stake is held firmly in the socket 4 by means of the chains arranged and locked as shown, the chains and the stake may be instantly released for releasing the load, which is done without danger to the operator and without any serious strain upon any portion of the apparatus. The rails 1, 1^a, furnish a smooth top surface and combine maximum strength, rigidity, and durability, and are therefore particularly serviceable for the construction of bunks.

I claim:

1. The combination, with a car platform and a bunk formed of two parallel bars, of a stake-socket arranged between said bars and attached to, and pendent therefrom, the front side of such socket being open, and releasable means for securing a stake detachably in said socket, substantially as described.

2. The combination, with a car platform and a bunk composed of parallel bars, of a stake-socket which is open on the front side, the same being attached to, and pendent from, the ends of said bars, and comprising a U-shaped plate and a curved plate engaging the lower central portion of the former, and chains adapted to secure a stake in the socket, and means for securing and releasing the chains, substantially as described.

3. The combination, with a car platform and a bunk composed of two bars arranged parallel, of a stake-socket arranged between the projecting ends of the bars and pendent therefrom, its front side being entirely open

and the rear side being curved as described, and stake-chains secured on one side to one of the bars, and means for securing the opposite ends of the chains to the opposite bar detachably, as shown and described.

4. The combination, with a car platform and a bunk composed of parallel bars, of a stake-socket attached to the bars and pendent therefrom, and its front edges provided with notches, of a chain for securing the lower end of a stake in said socket, the same being attached to one of the bars and adapted to engage the said notches, and means for securing the other end of the chain detachably, as described.

5. The combination, with the car platform and a bunk composed of parallel bars, of a stake-socket opened on the front side, and a stake adapted to rest therein and provided with a shoulder above the bars, chains attached to one of the bars and adapted to pass in front of the lower portion of the socket and stake, and the other chain being adapted to engage the aforesaid shoulder of the stake, and means for securing the chains detachably, substantially as described.

6. The combination, with a car platform, a bunk composed of bars arranged parallel, and a stake-socket attached to, and pendent from, the separated ends of the bars, of stake-securing chains attached at one end to one of the bars, a hook plate attached to the other ends of the chains and adapted to engage the adjacent bar, and a releasable catch for temporarily locking such hook plate, as shown and described.

MILO M. RUSSELL.

Witnesses:

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