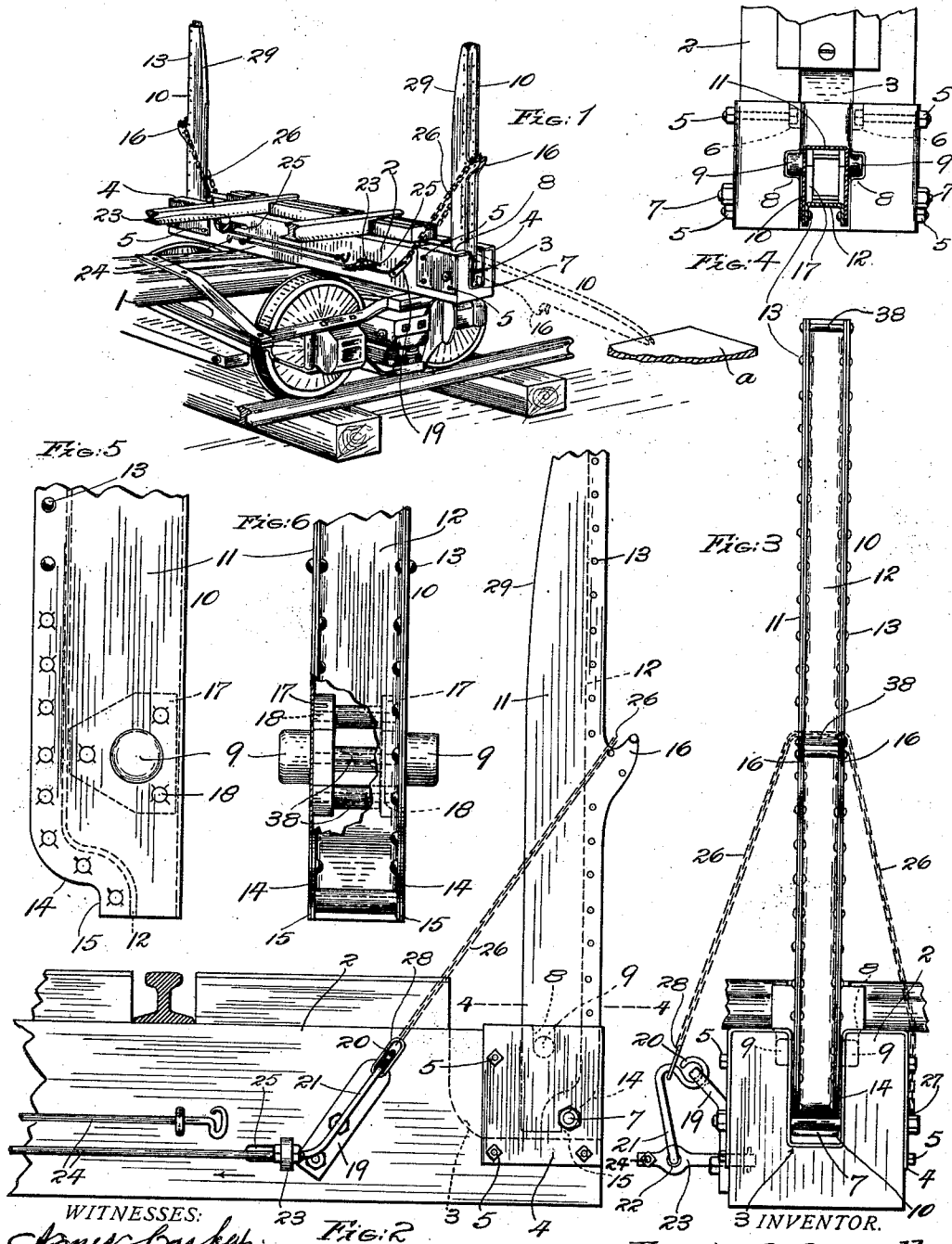


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 STAKE AND STAKE SEAT FOR LOGGING CARS AND THE LIKE.
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STAKE AND STAKE-SEAT FOR LOGGING-CARS AND THE LIKE.

1,018,818.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWIN A. GASKILL, a citizen of the United States, residing at Laneville, in the county of Tucker and State of West Virginia, have invented a certain new and useful Stake and Stake-Seat for Logging-Cars and the Like, of which the following is a specification.

This invention broadly considered relates to cars, trucks, wagons, sleds or other carriers, designed for the hauling of logs, poles or other round timber, and more particularly relates to an improved stake and stake seat piece, including stake tripping device adapted for application to the ends of bolsters or bunks of said carriers.

The principal object of the present invention is to provide a hinged metallic stake of the character designated, including its complementary tripping device and stake seat, possessed of comparatively simple structure, which may be cheaply manufactured, be efficient in use, cost comparatively little for upkeep, act as a protector for the ends of the bolsters or bunks of the carriers and which when tripped, serves as a skid in contra-distinction from being dropped free of the carrier.

Other objects of the invention relate to the providing of general details of construction and arrangement of parts as will hereinafter more fully appear.

With these and other objects in view, the invention consists of the improvements hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof and in which:

Figure 1, is a fragmentary view in perspective of a logging car equipped with devices embodying the invention, Fig. 2, is a fragmentary view in side elevation of a bolster or bunk equipped with a stake including its seat piece and complementary tripping device, Fig. 3, is a view in front elevation of Fig. 2, Fig. 4, is a sectional view taken upon the line 4—4 of Fig. 2, Fig. 5, is a view in side elevation of the lower portion of one of the stakes, illustrating a detail of construction, and Fig. 6, is a view in front elevation partly sectioned of Fig. 5.

Referring to the drawings and more particularly to Fig. 1, there is illustrated so much of a logging car as is necessary to the

understanding of the invention. In said figure the truck is designated 1, and its complementary bunk, 2. The respective ends of the bunk 2, are cut away or slotted as at 3, U-shaped fashion considered in cross-section. It will thus be seen that the end bottoms of the bunks are not cut through and that the end tops thereof are open. Fitted to the bunk ends are generally M-shaped metallic plates 4, forming stake seats, of which the outer plates engage the outer walls of the bunk and of which the intermediate portions have therein depressions forming sockets, which are fitted within the cut away portions of the bunk ends. These stake seats may be bolted as at 5, to the bunk 2, and in this connection it may be remarked that the inner walls of the rear portions of the sockets of the stake seats are recessed as at 6, for bolt-head accommodation. Passing through the stake seats 4, including the socket portions thereof are other bolts 7, for a purpose to be presently described. The inner walls of the socket portions of the stake seats are further recessed as at 8, to provide suitable bearings for receiving the trunnions 9, of the metallic stakes 10, of which any number may be used upon a car or other carrier. In the construction shown and about to be described, these stakes 10, are constructed from sheet metal, but obviously they may be made from cast iron or other material. However, by the construction shown and about to be described great strength is obtained thereby making them practically unbreakable in use, which is very important in the practice of hauling timber. The stakes 10, are shown as comprising substantially U-shaped plates 11, and 12, having nested relation with one another considered in cross-section, see Fig. 4, and are secured together by means of rivets 13 or the like. This construction serves to form tubular structures, possessing great strength and durability. The bottom portions of the stakes 10, are generally curved as at 14, terminating in straight portions 15, see Fig. 5.

In practice, the straight portions 15, of the stakes 10, are adapted to abut against the bolts 7, when said stakes are in normal or vertical position, see Figs. 1, 2, and 3. Intermediate the bottoms and tops of the stakes 10, are projections forming lips 16, for a purpose to be presently described. Adjacent the bottoms and toward the backs of the

stakes 10, are the trunnions 9, before mentioned. These trunnions 9, are preferably cast and are shown as extending laterally from plates 17, see Figs. 5, and 6. The plates 17, are contained within the hollow portions of the stakes 10, and are shown as being riveted as at 18, to the sides of the stakes. In this connection, it may be remarked that stay rivet sleeves 38, are present at this point of the stake structure as well as at the tops of the stakes and also adjacent the lips 16, of the stakes.

By virtue of the trunnions 9, and recessed portions 8, of the stake seats, the stakes 10, have hinged relation with the bunk ends. At the same time, however, the stakes may be readily detached from or caused to engage with the stake seats as desired. A description will now be given of the mechanism disclosed for tripping the stakes 10, particular reference being had to Figs. 1, 2, and 3. Shown as having fixed relation with the bunk 2, at each end thereof are apertured plates 19. Passing through the apertured portions of the plates 19, are the eyes 20, of irregularly shaped detents 21, the free ends of which are adapted to engage and be retained in the apertured portions 22, of slidably arranged levers 23, see Fig. 3, operable by means of bars 24, it being understood that the levers 23, work in slots 25, in the bunk sides, see Fig. 2. Chains, cables or the like 26, are present for normally keeping the stakes 10, in vertical position. The ends 27, of the parts 26, have fixed relation with the bunks 2, pass over the lips 16, of the stakes 10, and connect with the detents 21, by virtue of links 28. In unloading a carrier, the stake or stakes to be tripped are operated from the side of the carrier opposite to that from which the load is dumped. For illustration, assuming that the stake shown in Fig. 2, is to be operated, the rod 24, is moved in the direction of the arrow in said figure, thereby causing the lever 23, to move through its slot 25, and thus cause the detent 21, to leave the aperture 22, see Fig. 3, of said lever. As the detent 21, is released, the tendency thereof is to fly upward and thus cause itself to be disengaged from the link 28, of the chain or the like 26. As the chain 26, is released, the stake 10, moves around its hinged point until the top thereof, drops to a proper support as, *a*, and assumes the position shown by dotted lines in Fig. 1. In this position, the stakes it will be seen act as skids, whereby logs, poles and the like may be readily rolled from off the truck or other carrier. In this connection, it may be remarked that the parts 29, of the stakes 10, are slightly curved, in order to facilitate the movement of the timber being unloaded. Obviously, to reset the stakes 10, requires but a few moments' time and may be readily accom-

plished and will be readily understood, it is thought, without resorting to further description relative thereto.

By the above described, arrangement and construction of parts, it will be readily seen that as the stakes have hinged relation with the bunks, said stakes acting as skids are not liable to breakage by rolling timber, as would be the case if the stakes were detached from the carrier when tripped and laid upon the ground in the path of falling timber. The bunk ends are protected by the stake seat and are not crushed by timber as it is rolled from the carrier. As the trunnions 9, of the stakes 10, are to the rear of and out of line with the vertical axes of the stakes, tripping thereof may be readily and easily accomplished.

What I claim is:

1. In combination a wooden bunk having a slotted end, and a stake seat comprising a one piece thin metallic strap extending across the top of and bent over the bunk sides to protect the same the central portion of said strap being bent inwardly to snugly fit within the slot of the bunk said depressed portion having its side walls pressed out to form trunnion receiving recesses.

2. In combination a wooden bunk having a slotted end, a thin metallic strap bent substantially M-shaped fashion for the bunk end the central portion of said plate forming a socket which is fitted within the slot of the bunk end the side walls of said socket being pressed out to form recesses for the reception of stake trunnions and means for securing the strap to the bunk.

3. A stake of the character described comprising a tubular construction consisting of nested metallic members of substantially U-shaped cross-section the outer edges of which are riveted together and provided intermediate the bottom and top of said stake with outwardly extending lips, plates contained within and riveted to said stake walls, and trunnions carried by said plates said trunnions projecting laterally through the side walls of the stake.

4. A stake of the character described comprising a tubular construction consisting of nested metallic members of substantially U-shaped cross-section the outer edges of which are riveted together and which are provided with lips intermediate the top and bottom of said stake, plates contained within and riveted to the side walls of the said members, trunnions carried by said plates and extended laterally through openings in the side walls of said stake and stay rivet sleeves for the rivets at the top and bottom of the stake and stay rivet sleeves for the rivets which secure said plates to the stake.

5. In apparatus of the class described the combination of a bunk having a slotted end,

a seat piece having a socket provided with recessed portions fitted over the bunk end, a stake movable with respect to the socket said stake having trunnions accommodated by the recessed portions of said socket and means for tripping the stake.

6. In a logging car the combination of a wooden bunk having a slotted end, a single metallic strap extending across the top of said bunk and passing down over the opposite sides of said bunk to protect the same the central portion of said strap being channeled and fitted snugly within the slot of the bunk and having pressed outwardly therefrom recessed portions which fit within counter sunk portions of the bunk end, a pressed steel stake of relatively tubular construction pivotally resting in the depressed

portion of the strap and freely capable of being entirely removed therefrom said stake being equipped with trunnions which are accommodated by the recesses in the strap, front edges of said stake being provided with lips, a cross-bar passing through the channeled portion of the strap against which the pivotal end of the stake abuts to prevent retrograde movement of the stake, means cooperating with the lips of the stake for retaining the stake in vertical position and means for tripping the stake.

In testimony whereof, I have hereunto signed my name.

EDWIN A. GASKILL.

Witnesses:

WM. ALLNOCH,
CHAS. T. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
