

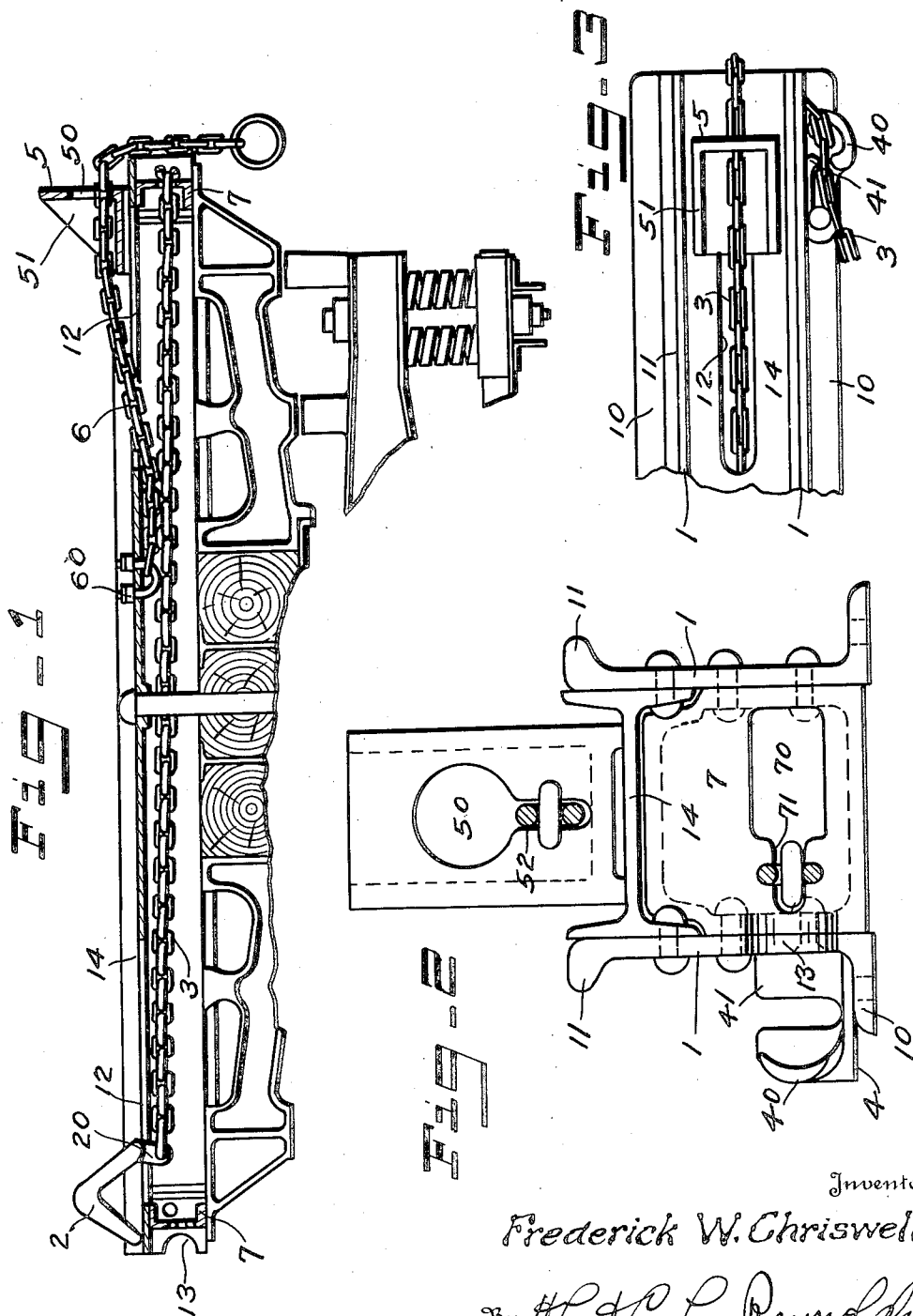
Dec. 23, 1924.

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LOG BUNK

Filed April 24, 1924

1,520,009



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LOG BUNK.

Application filed April 24, 1924 Serial No. 708,720.

To all whom it may concern:

Be it known that I, FREDERICK W. CHRISWELL, a citizen of the United States of America, and resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Log Bunks, of which the following is a specification.

My invention relates to log bunks and consists of an improved type of construction in which standard rolled shapes are employed to cheaply produce a strong and rugged bunk and one which is excellently adapted for use under certain conditions.

The object of my invention is to cheaply produce a bunk which is especially adapted for use on cars in hauling heavy logs where the conditions do not require that the bunk shall dog or cut into the logs to prevent endwise sliding of the logs over the bunks. The invention consists of a bunk constructed of certain shapes of beams combined together in a novel manner, whereby a superior bunk is made.

In the accompanying drawings I have shown my invention in the form of construction which is now preferred.

Figure 1 is a side sectional elevation taken through the bunk lengthwise thereof, showing the chocks in place.

Figure 2 is an end elevation of the bunk, the same being taken from the end which is at the right in Figure 1.

Figure 3 is a top or plan view of the right hand end of the bunk as shown in Figure 1.

The bunk which is the subject of this invention is designed for application to railroad flat cars for the purpose of adapting them for hauling logs. The bunk is, of course, adapted for application to motor trucks trailers or other vehicles when used for hauling logs or like products which may be held in place by the use of chocks. While the invention will be described as applied to bunks on cars, it is to be understood that it is intended to cover a bunk and chock applied for any use to which such objects are known to be adapted.

The frame of the bunk, in the type of construction shown and now preferred, comprises two side webs 1, each of these being composed of a bulb angle placed with the broad flat flange 10 downward and in hori-

zontal position, and with the bulbs 11 at their upper edges. These two bulb angles are connected by an I-beam 14, which is placed with its web horizontal and sufficiently below the upper edge of the bulb angles that the upper edge of the base flanges do not extend higher than the upper portion of the bulbs 11. This relative position of the I-beam and the bulb angles is that which is preferred for the type of use in which the bunk is placed upon railroad cars or the special type of logging cars which are known to the trade as connected trucks. That is where the engagement of the logs with the bunk is not relied upon to transmit draft between the bunks.

If, however, the bunk is designed for application to trucks which are not permanently connected but which are connected for draft purposes by the logs applied thereto, then the preferred location of the I-beam 14 would be that in which the edge of its upper flanges would project well above the upper edge of the bulb angles, thereby forming a sharp edge which will dig into the logs and thus prevent their movement across the bunks and provide for the traction between the two trucks connected by the logs.

The I-beam 14 is provided near each end with a slot 12. At one end a chock 2, which is of metal forming a trough-like section or an approximation to a V-shape, is placed in the channel which lies between the opposite flanges of the I-beam. This chock is of old construction. It has an arm 20 which extends downward through the slot 12 in the I-beam and to this arm is connected a chain 3, which is of sufficient length to extend to the opposite end of the bunk and to project therefrom a sufficient distance to provide for dogging or holding the chain. At the end of the bunk from which the chain 3 projects, one of the bulb angles or side webs of the completed bunk is preferably provided with a notch or recess 13 to accommodate the chain when the same is bent around to one side. At the same side of the web is secured a chain holding dog 4. This dog is provided with an upwardly extending web or flange 40 and with an opposed flange 41, the edges of the two being separated sufficiently to permit the placing of a link of the chain 3 between them when

placed edgewise with relation thereto, and not far enough apart to permit the next link which is in a plane at right angles to pass through. This forms a dog capable of engaging the chain and holding it, at intervals represented by the length of a single link.

I have shown at the other end of the bunk, a chock of somewhat different construction, which may be used in connection with the chock just described. This chock comprises two right angularly positioned plates which are connected at their ends by cross webs 51. The construction of this is clearly shown in the various views. The web which is placed vertical with relation to the bunk, is provided with a chain-receiving opening 50 having a narrower slot 52 extending to a lower point. This slot 52 is of such width as to receive the chain when inserted edgewise therein and to form a stop for the chain, to thereby prevent the chock being moved farther outward. The chain 6, which is associated with the chock 5, has one end fixedly secured to the bunk well inward from its outer end, as by the use of a staple or ring 60. The chock 5 may be moved back and forth for a distance corresponding approximately with the length of the slot 12 at this end of the bunk. It may be locked in any position desired, within limitations imposed by the lengths of the links of the chain.

Spacing plates 7 are secured between the side webs of the bunk at each end. These serve both as supports for the side webs and also as means for additionally locking and holding the chain 3 which is connected with the chock 2. These plates 7 are provided with an opening 70, of ample capacity to permit free passage of the chock-retaining chain 3, and at one side, being the side to which the chain-holding dog 4 is secured, are preferably provided with a slot 71 of a size to receive the links of the chain when entered edgewise therein. This forms a dog for resisting movement of the chock 2 towards the opposite end of the bunk. The dog 4, which is placed outside of the bunk, forms an additional or safety lock which

will prevent the chain from moving horizontally out of the slot 71.

The bulb edge of the angle is sufficiently broad and its edges are somewhat rounded, so that it does not cut into the logs placed thereon to such extent as to mar or dig into the log. At the same time they will be compressed into relatively soft bark and also engage sound wood in such manner as to hold the logs from endwise movement over the bunk such as is produced by coupling and shunting the cars and application of brakes to the cars and the jerks of starting a train.

The bulb at the upper edge of the angles gives the bulk of metal needed to give strength to resist weights placed thereon while furnishing a rounded or relatively smooth surface for engagement with the logs, while the I-beam riveted to the bulb angles gives the strength to resist side strains and furnishes a web upon which to support the chocks. The position of the I-beam close to the upper edge of the bulb angles provides the reinforcement against stresses acting horizontally and transversely of the bunk, close to the point where they would be applied.

What I claim as my invention is:

1. A log bunk having its side webs composed of bulb angles placed with the bulb upward and the base flanges extending outwardly, an I-beam having its web placed horizontally and connecting the bulb angles close to their upper edges.

2. A log bunk having its side webs composed of two bulb angles placed with their bulbs uppermost and base flanges extending outwardly, an I-beam with its web horizontal and its downwardly-extending base flanges riveted to the inner faces of the bulb angles near their upper edges, the web of the I-beam having a longitudinally extending slot near each end and spacing plates connecting the bunk sides beneath the I-beam.

Signed at Seattle, King County, Washington, this 20th day of March, 1924.

FREDERICK W. CHRISWELL.