C. E. EVANS.

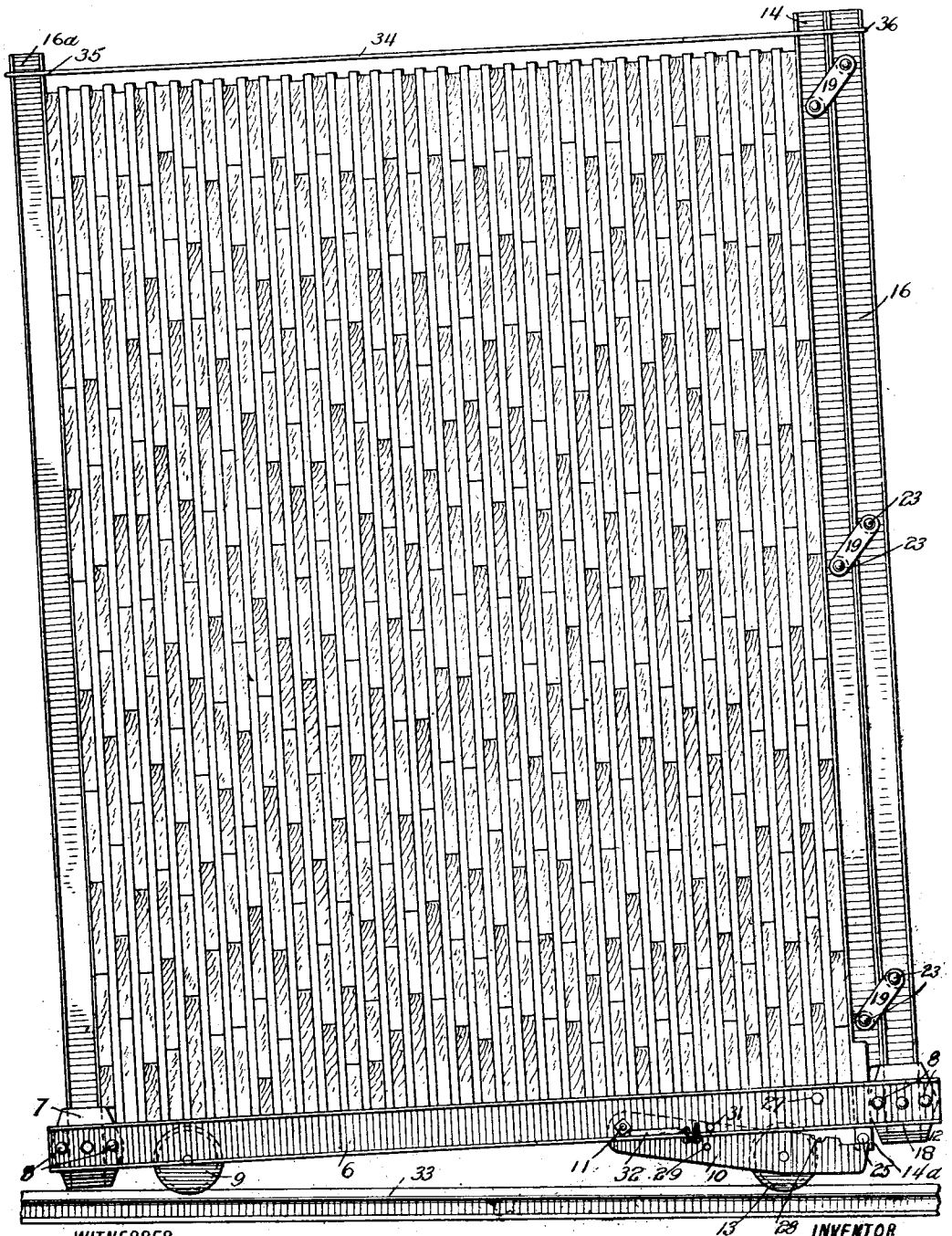
KILN CAR.

APPLICATION FILED APR. 26, 1913.

1,128,119.

Patented Feb. 9, 1915

3 SHEETS—SHEET 1.



WITNESSES

G. Robert Thomas

E. B. Marshall

FIG. I.

INVENTOR

Charles E. Evans

BY Munn & Co

ATTORNEYS

C. E. EVANS.

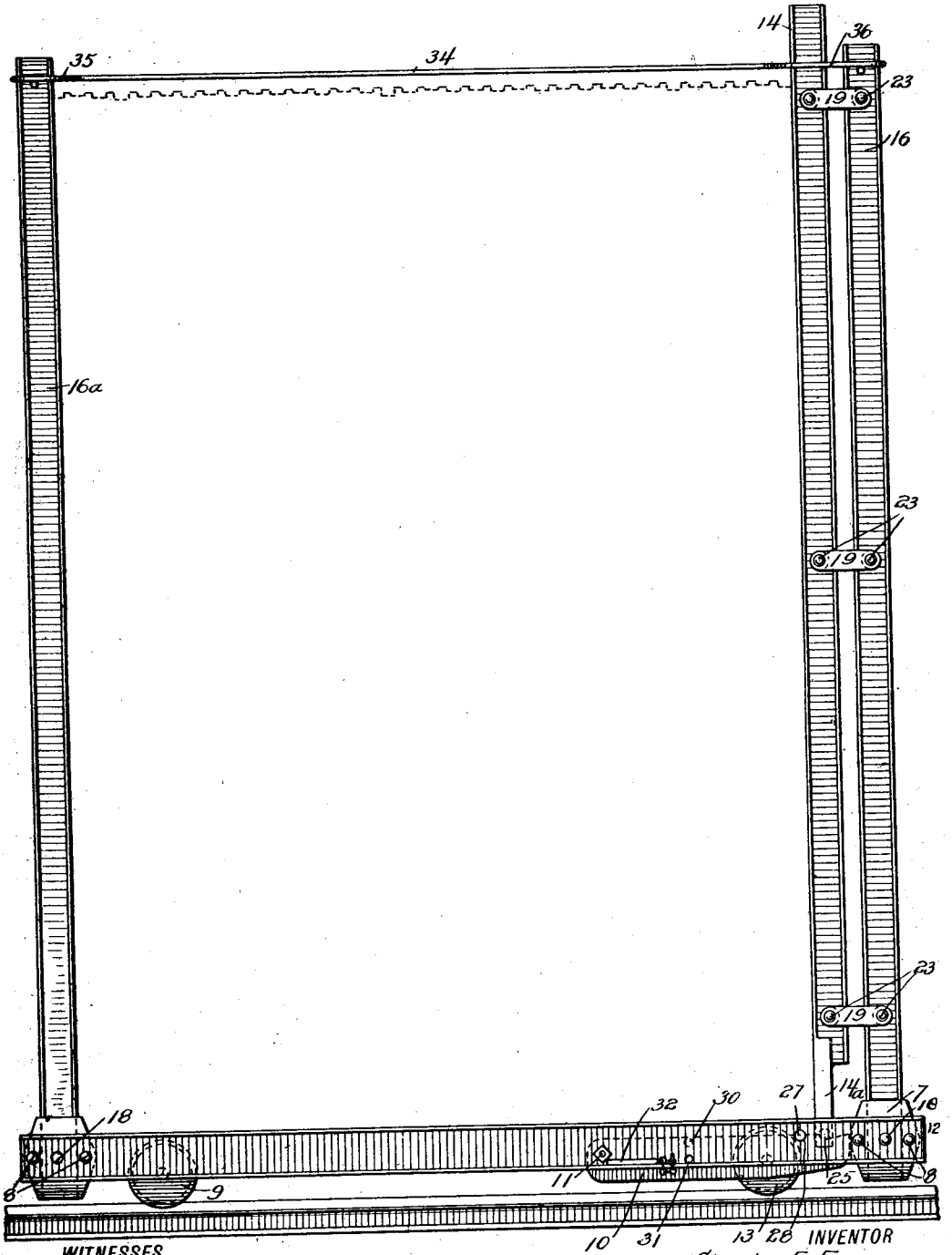
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3 SHEETS—SHEET 2.



WITNESSES

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FIG. 2.

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3 SHEETS—SHEET 3.

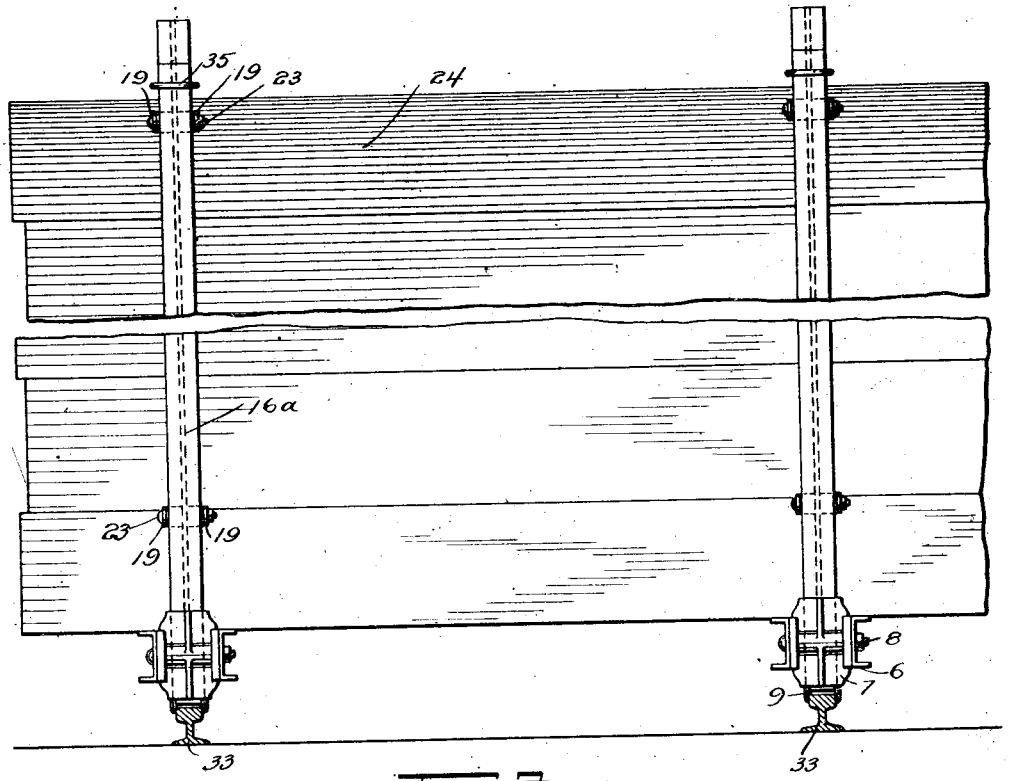


FIG. 3.

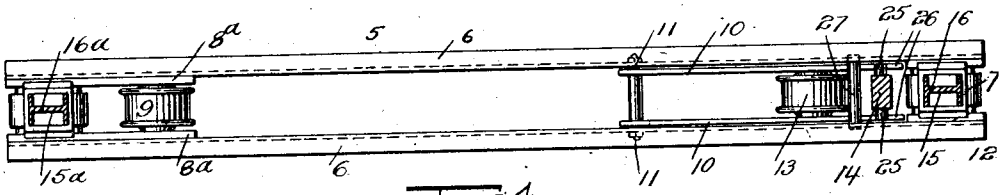
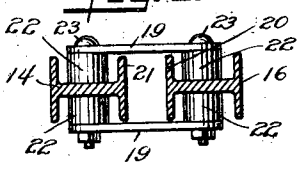


FIG. 4.

FIG. 5.



FIG. 6.



WITNESSES

G. Robert Thomas

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UNITED STATES PATENT OFFICE.

CHARLES E. EVANS, OF WEED, CALIFORNIA.

KILN-CAR.

1,128,119. Specification of Letters Patent. Patented Feb. 9, 1915.

Application filed April 26, 1913. Serial No. 763,781.

To all whom it may concern:

Be it known that I, CHARLES E. EVANS, a citizen of the United States, and a resident of Weed, in the county of Siskiyou and State of California, have invented a new and Improved Kiln-Car, of which the following is a full, clear, and exact description.

My invention has for its object to provide a kiln car, having a movable stake connected by a series of links with a stake secured to the body of the car, one of the wheels of the car being journaled to a lever fulcrumed to the body of the car, and this lever engaging a member at the bottom of the movable stake, so that the weight of the material on the body of the car will serve to move the body down relatively to the lever, thereby moving the movable stake relatively to the stake secured to the body, for pressing the lumber against another stake.

Another object of the invention is to pivot the lever at one end to the body, with the other end engaging the movable stake, and with the wheel journaled to the lever, intermediate of its ends, so that the movable stake will be moved upwardly by the lever when the material on the body shrinks, thereby preventing unnecessary friction, between the material and the body, when the material is pressed against a stake at the other end of the body.

Additional objects of the invention will appear in the following complete specification, in which the preferred form of the invention is disclosed.

In the drawings similar characters of reference indicate corresponding parts in all the views, in which—

Figure 1 is a side elevation of my improved kiln car: showing the position of the parts when the car is loaded: Fig. 2 is a side elevation of my kiln car, showing the position of the movable stake when it is forced upward and in the direction of the stake at the other end of the car: Fig. 3 is an end view of two kiln cars showing one manner in which they may be used: Fig. 4 is a sectional plan view of Fig. 3; Fig. 5 is a sectional plan view, showing the link which is used for connecting the stakes at the ends of the car; and Fig. 6 is a sectional plan view showing how the movable stake is connected by the links with the stake at the end of the car.

By referring to the drawings it will be seen that a body 5 is provided, having two angle members 6, which are spaced apart, members 7 being disposed between the angle members 6, at the ends of the body 5. These members 7 have openings therethrough, which register with the openings in the angle members 6, and in which are disposed bolts 8, by which means the members 7 are held to the angle members 6. At one set of ends of the angle members 6 there are members 8^a, which are disposed at the inner sides of the angle members, and which are secured thereto, a wheel 9 being disposed between the members 8^a and being journaled thereto. Spaced from the other ends of the angle members 6, and disposed therebetween, there are two levers 10, which are fulcrumed to the angle members 6, at 11, the levers 10 extending in the direction of the end 12 of the body 5. Disposed between these levers 10 and journaled thereto, there is a supporting wheel or member 13, these levers 10 serving to move the stake or member 14, in a manner which will hereafter be described. In the members 7 there are channels 15 and 15^a, for receiving the stakes or members 16 and 16^a, these stakes or members 16 and 16^a being constructed of angle members, as will best be seen by referring to Fig. 4 of the drawings. The stake or member 16 is held in position relatively to the body 5 by means of the bolt 18, which extends through orifices in the sides of the member 7, between which the lower end of the stake or member 16 is disposed, the bolt 18 extending through an opening in the lower portion of the said stake or member 16. The stake or member 16^a is supported by means of the pin 17, which is disposed across the channel 15^a, for engaging the bottom of the stake or member 16^a.

The stake or member 14 is connected to the stake or member 16 by means of the links 19, which are disposed as shown in Fig. 6 of

the drawings, and which are articulated to the stakes or members 14 and 16. The links 19 are spaced from the flanges 20 and 21 of the stakes or members 16 and 14, so that the stake or member 14 may be raised or lowered relatively to the stake or member 16, and while in parallel position therewith. Collars 22 are mounted on the bolts 23, which connect the links 19 with the stakes or members 14 and 16, for holding the links 19 spaced from the flanges 20 and 21.

It will be seen that when the stake or member 14 is raised from the position shown in Fig. 1 to the position shown in Fig. 2 of the drawings, the stake or member 14 will be moved in the direction of the stake or member 16ª, to press the lumber or other material 24, deposited on the body 5, against the stake or member 16ª.

As a means of raising the stake or member 14, I provide the bottom 14ª of the stake or member 14, with projecting studs 25, which are engaged by the ends 26 of the levers 10, so that when a weight is disposed on the body 5, the weight will press the body 5 down relatively to the levers 10 and the wheel 13 for moving the stake or member 14 upward, relatively to the stake or member 16.

As a means of checking the downward movement of the body 5 relatively to the levers 10, I provide a stop 27, which is secured to the angle members 6, and which extends from one of the angle members to the other, this stop 27 being provided for engaging the levers 10 and limiting the downward movement of the body 5 relatively thereto.

As will best be seen by referring to Fig. 1 of the drawings, there are notches 28 in the levers 10, in which the stop 27 is seated, when the body 5 is disposed relatively to the levers 10, in the position shown in Fig. 2 of the drawings. There are also orifices 29 and 30, in the levers 10, for registering with the orifices 31 in the angle members 6, so that a pin 32 may be disposed through the orifices 31, and the orifices 29 and 30, for holding the levers 10, either in the position shown in Fig. 1 of the drawings, or in the position shown in Fig. 2 of the drawings.

The wheels 9 and 13 are adapted to travel on the tracks 33. As a means of connecting the upper ends of the stakes or members 14, 16 and 16ª, I provide the link 34, having the loop 35, in which the stake or member 16ª is normally disposed, the link 34 also having a larger loop 36, in which the stakes or members 14 and 16 are normally disposed. This link 34 strengthens the car, and, at the same time, acts as a guide for the movable member or link 14. It will of course be understood that the stakes 14 and 16, with the means for operating the stake 14 relatively to the stake 16, may be used on either or both ends of the car. The end 12 of the body 5 may be supported while the car is being loaded, when the stake or member 15 will be disposed as shown in Fig. 1 of the drawings.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a kiln car, a body, a stake secured to the body, a second stake movable relatively to the first stake, links connecting the stakes, a lever fulcrumed to the body and engaging the second stake, for moving the latter, and a supporting member journaled to the lever.

2. In a kiln car, a body, a stake secured to the body, a second stake movable relatively to the first stake, links connecting the stakes, a lever fulcrumed at one end to the body, with the other end of the lever engaging the second-mentioned stake, for raising the latter, and a supporting member on the lever intermediate of its ends.

3. In a kiln car, a body having an end, a stake, means for guiding the stake vertically away from the end of the body, a lever fulcrumed to the body engaging the stake for moving the latter relatively to the body, and a supporting member on the lever.

4. In a kiln car, a body having an end, a stake, means for guiding the stake vertically away from the end of the body, a lever fulcrumed at one end to the body with the other end of the lever engaging the stake, for moving it relatively to the body, and a supporting member on the lever, intermediate of its ends.

5. In a kiln car a body having a member, a lever pivoted to the body, and having a member normally resting on a supporting surface, a third member on the body movable relatively to the first member under the influence of the lever and means for directing the movement of the third member.

6. In a kiln car, a body having a member, a second member, means for guiding the second member in the direction of the first member and substantially parallel therewith, a third member movable relatively to the body and normally resting on a support, and means coöperating with the first means and operable by the third member for moving the second in the direction of the first member.

7. In a kiln car, a member for resting on a support, a body adapted to move down relatively to the member, a member on the body, another member on the body movable in the direction of the second member, and means by which the first member is adapted for moving the third member.

8. In a kiln car, two stakes spaced apart, another stake disposed adjacent one of the first mentioned stakes, pivoted links connecting the said other stake with one of the first mentioned stakes, and means operable

under the influence of a weight between the first stakes for moving the said other stake relatively to the first stakes.

9. In a kiln car, a frame having two stakes, a support for moving relatively to the frame, links pivoted to one of the stakes and extending in the general direction of the other stake, and a stake resting on the support and connected with the links for the purpose specified.

10. In a kiln car, a frame having two stakes, a lever pivoted to the frame and extending downward, another stake resting on the lever and links connecting one of the first mentioned stakes with the third stake for the purpose specified.

11. In a kiln car, a frame having two stakes, a member movable relatively to the frame and operable by engagement with a support, links pivoted to one of the stakes and extending in the general direction of the other stake, and means engaged by the links and the member for the purpose specified.

12. In a kiln car, a frame having a stake, a member for moving relatively to the frame and normally resting on a support, a second stake resting on the member and links pivoted to the first stake and having means for engaging the second stake.

13. In a kiln car, a frame having a stake adjacent one of its ends, a second stake disposed adjacent the first stake, links pivoted to one of the stakes and having means for engaging the other stake and means for moving one of the stakes relatively to the other stake under the influence of a weight over the body of the frame.

14. In a kiln car, a frame having two stakes spaced apart, another stake disposed adjacent one of the first mentioned stakes, a link pivoted to one of the first mentioned stakes of the frame and normally extending obliquely, means on the link for engaging the third mentioned stake, and means for moving the third mentioned stake relatively to the frame under the influence of a weight over the frame.

15. In a kiln car, two stakes spaced apart, another stake movable vertically relatively to the said two stakes, pivoted links connecting the said other stake with one of the first mentioned stakes, and means operable under the influence of a weight between the first stakes for moving the said other stake relatively to the first stakes.

16. In a kiln car, a frame having two stakes, a member movable relatively to the frame, links pivoted to one of the stakes and extending in the general direction of the other stake, and means engaging the member and the links for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. EVANS.

Witnesses:
JAMES G. COTCHETT.
R. A. CLOTHIER.