

No. 745,839.

PATENTED DEC. 1, 1903.

J. M. HETFIELD.
RAILWAY CAR.

APPLICATION FILED MAR. 20, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

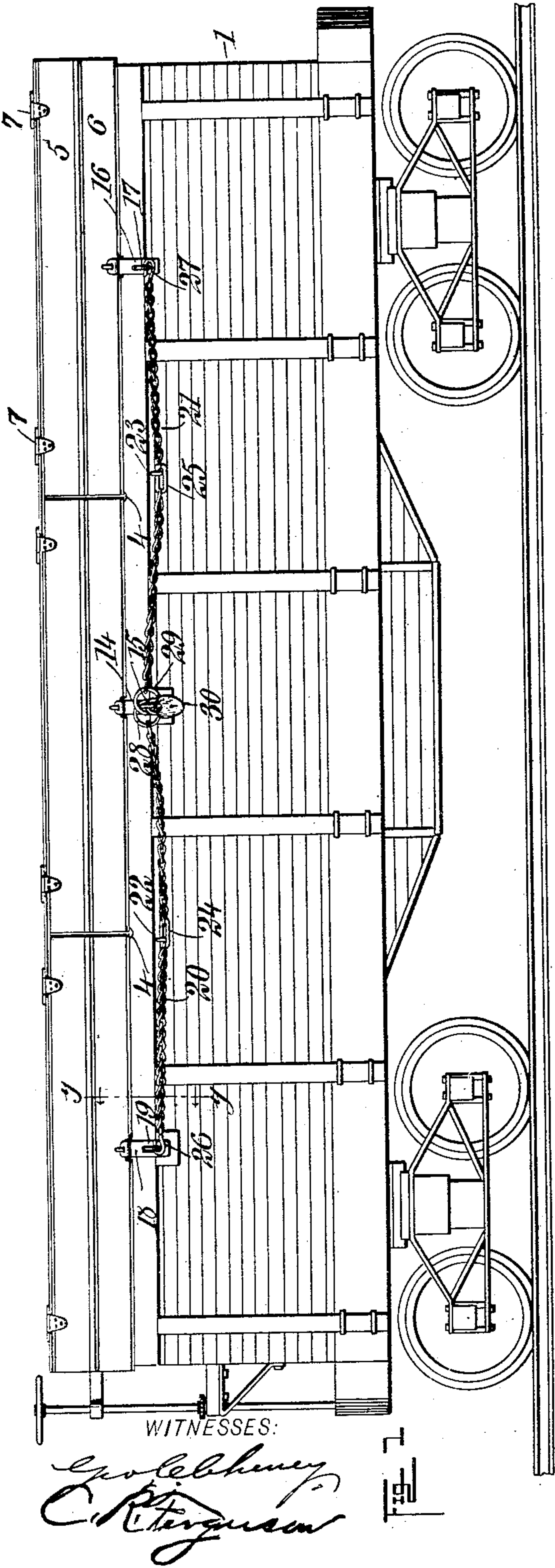


Fig. 1

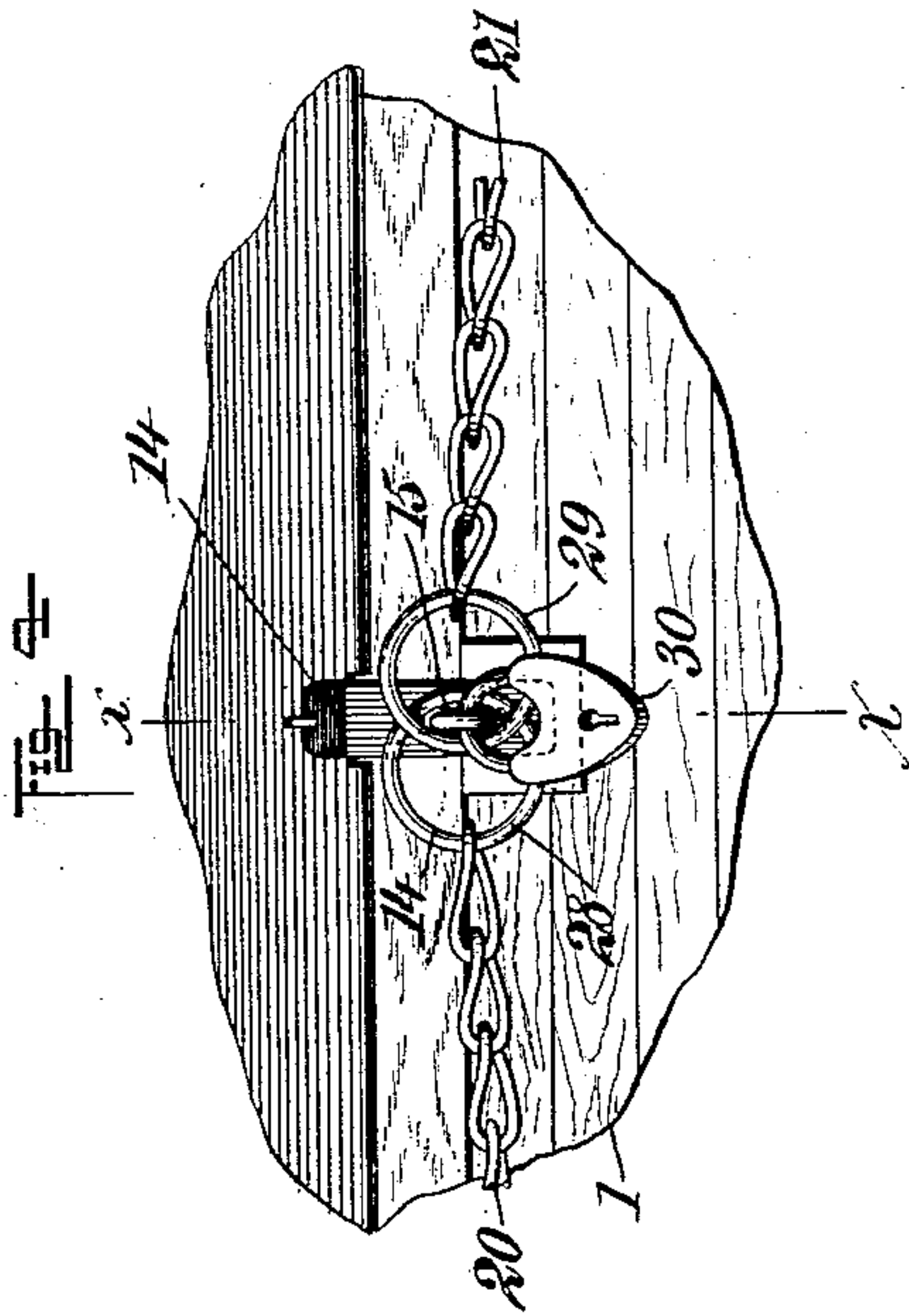
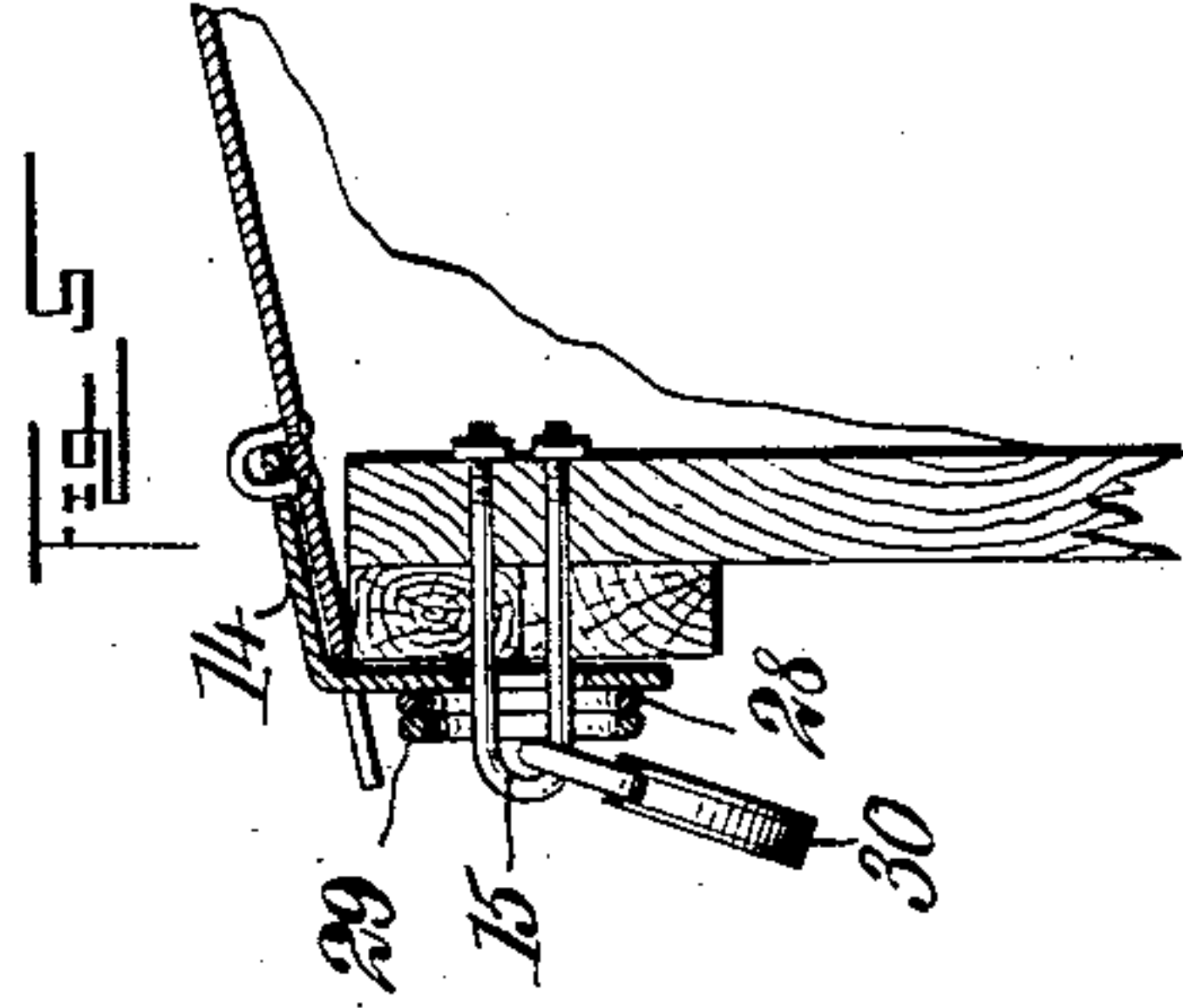
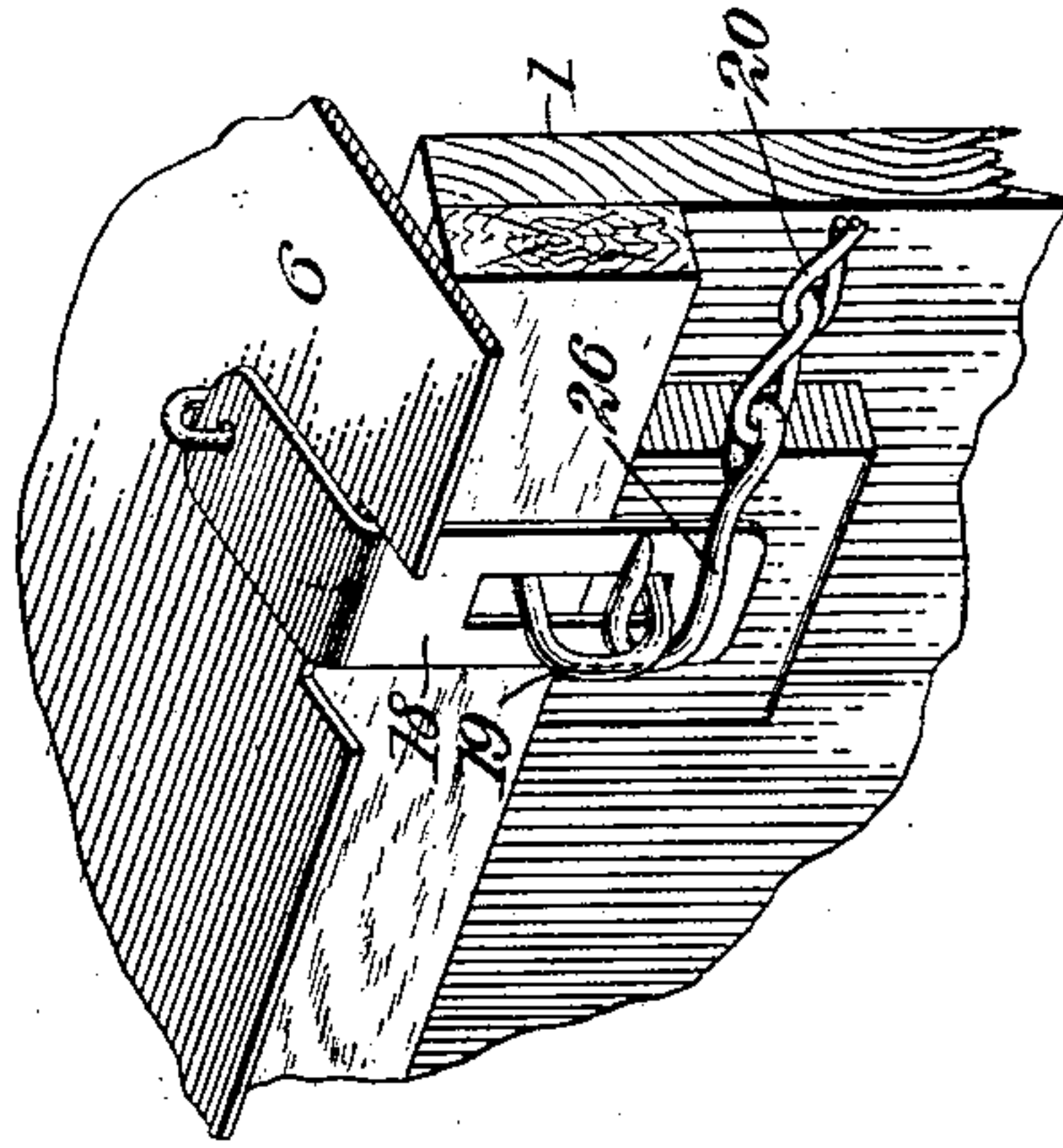


Fig. 2

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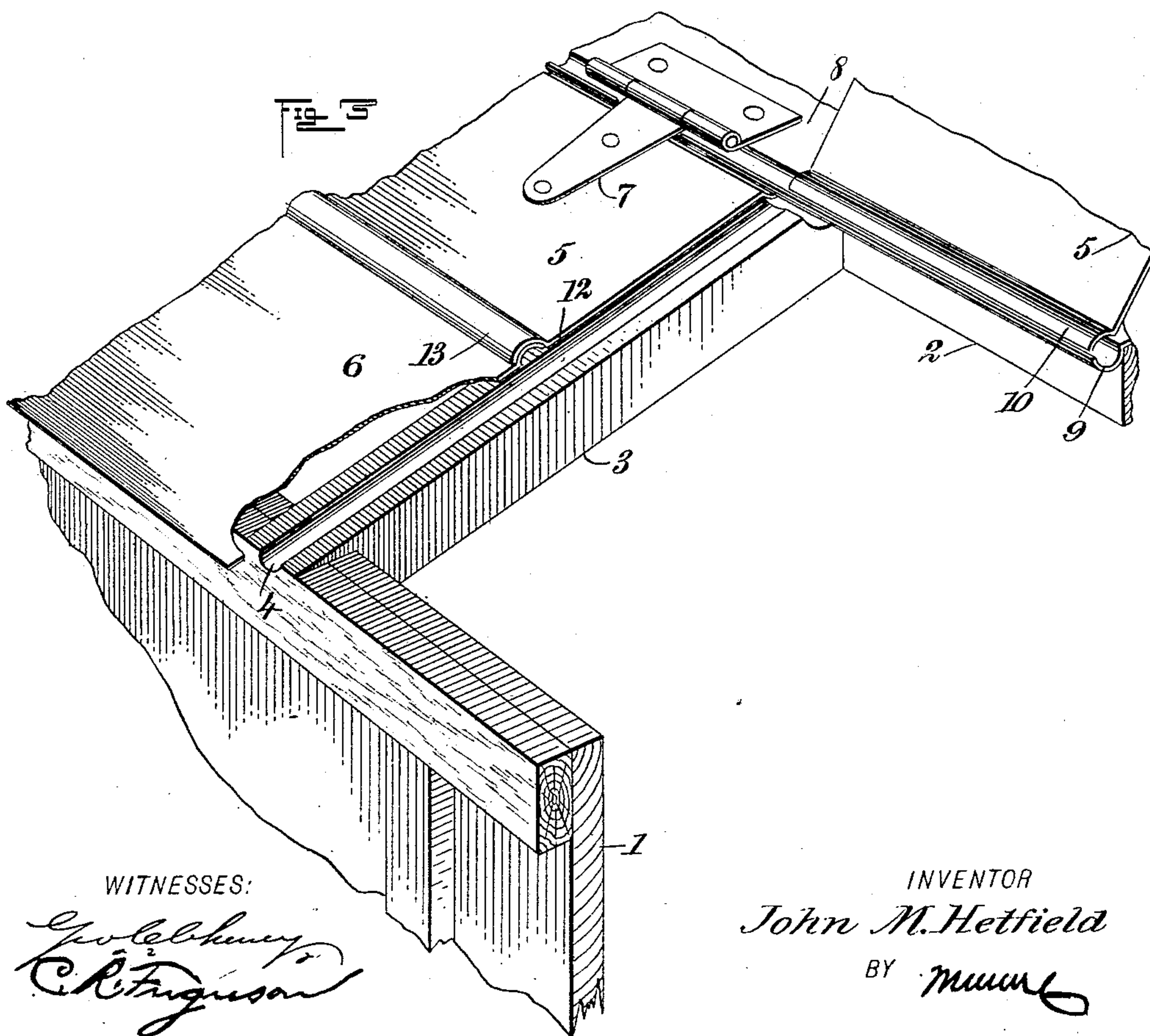
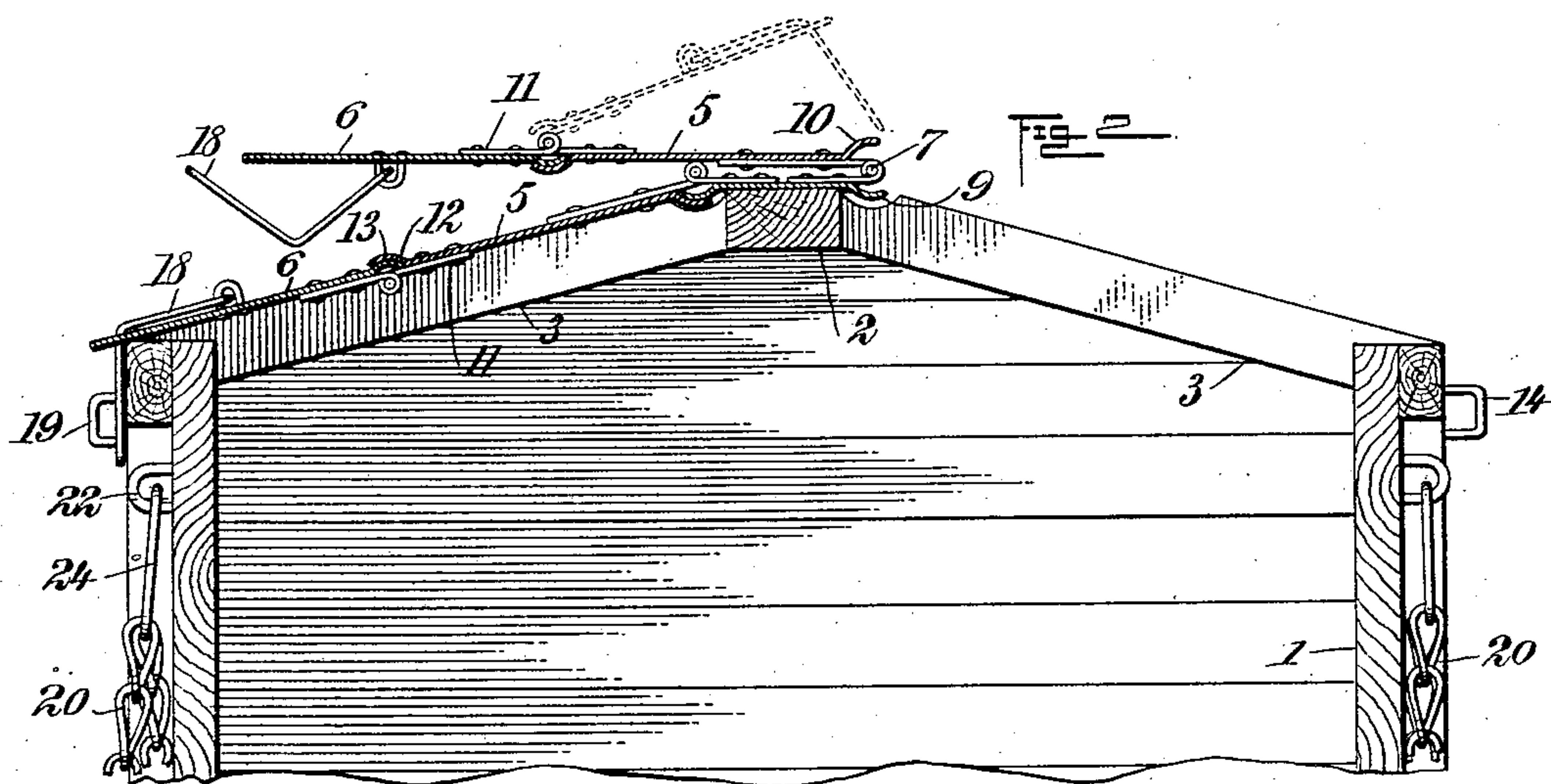
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2 SHEETS—SHEET 2.



WITNESSES:

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INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN M. HETFIELD, OF PLAINFIELD, NEW JERSEY, ASSIGNOR OF THREE-FOURTHS TO JENS HANSEN, JOSUA D. LOIZEAUX, AND WILLIAM R. CODINGTON, OF PLAINFIELD, NEW JERSEY.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 745,839, dated December 1, 1903.

Application filed March 20, 1903. Serial No. 148,680. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. HETFIELD, a citizen of the United States, and a resident of Plainfield, in the county of Union and State of New Jersey, have invented a new and Improved Railway-Car, of which the following is a full, clear, and exact description.

This invention relates particularly to improvements in cars of the gondola or coal-carrying type, an object being to provide a car of this character with a cover or covers of novel construction which will effectually prevent the entrance of snow, sleet, or rain, preventing the danger of freezing, and thus causing a saving of time in the unloading of a car. The car is equally adapted to carry lime, as the roof is absolutely water-tight.

Another object is to provide a simple means whereby the several covers of a side may be secured by one lock, thereby preventing stealing while in transit, this being a great item all the year through.

I will describe a railway-car embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a railway-car embodying my invention. Fig. 2 is an end view thereof. Fig. 3 is a perspective view of a portion of the car. Fig. 4 is a detail view showing the locking means for the several covers of a side. Fig. 5 is a section on the line *x x* of Fig. 4, and Fig. 6 is a section on the line *y y* of Fig. 1.

Referring to the drawings, 1 designates the body of the car, having a ridge-beam 2 extended along its upper side, and from this ridge-beam cross-beams 3 extend at a downward incline to connection with the tops of the side portions of the car. These beams 3 are channeled, as indicated at 4, to form troughs for the discharge of water. Of course there will be one of these beams 3 between adjacent covers of a side, so that the water dripping off the edges of the covers will fall into the channel. Each cover, as here shown,

consists of metal and is formed in two sections 5 6, the upper section 5 having hinge connections 7 with the ridge-beam 2. Secured along the upper side of the ridge-beam is a metal plate 8, the edges of which, at the sides of the beam, are made trough-shaped, as indicated at 9, and the upper edge of each cover is provided with a curved flange 10 for engaging underneath the trough 9, as clearly shown in Fig. 2.

The beams 3, it will be noted, are cut away at the upper portion to receive the said flanges 10. The parts 5 and 6 are connected by hinges 11, which are placed on the under side. At its upper edge the section 6 of a cover is curved upward, as at 12, and the adjacent edge of the section 5 is curved to engage over the top of the curved portion 12, as indicated at 13. By this arrangement water falling on the covers will be carried over the joints and discharged at the lower end.

In Fig. 1 I have shown three covers on a side. The metallic cover is provided with a hasp 14 for engaging with a staple 15, secured in the car-body. One end cover is provided with a hasp 16 for engaging with a staple 17, while the other end cover is provided with a hasp 18 for engaging with a staple 19. The locking-chains 20 21 are secured to the car-body by means of staples 22 23 passing through elongated links 24 25, and one end of the chain 20 is provided with a hook 26 for engaging the staple 19, while the outer end of the chain 21 is provided with a hook 27 for engaging with the staple 17, and the inner ends of these chains are respectively provided with rings 28 29 for engaging over the staples 15.

In locking the covers the hook portions of the chains are to be engaged with the staples for the end covers and while the chains are drawn taut to pass the rings over the center staple, the elongated links 24 and 25 admitting of this movement and preventing the disengagement of the hooks from the staples. After passing the rings over the center staple they are to be secured by means of a padlock 30, the keys of which are only held by the shifting crews of railroad companies and are

only unlocked when the cars are placed ready to unload, one key fitting all the locks.

It is obvious that a car embodying my invention will effectually prevent the entrance
5 of snow, rain, or the like, which in winter-time is apt to freeze, entailing much labor to loosen and remove the coal by the use of picks and crowbars, which injures the cars in unloading.

10 Frozen coal cannot be cleaned, as the dirt is frozen and clings to the coal and only lets go when delivered into some private coal-vault, where it thaws out, showing the dirt, of which there is so much complaint.

15 The center beam 2, forming a twelve-inch flat surface, enables the trainmen to walk along the top of empty cars with safety and despatch, whereas open cars offer no means of reaching the center of the train from either
20 end with safety. All of these improvements I claim can be readily and with small expense added to the cars now in use.

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

1. The combination with a car-body and a ridge-beam thereon, of trough-shaped projections on said beam, and covers hinged to the beam, the upper edges of the covers being curved to engage underneath said projections.
30

2. The combination with a car-body, of a ridge-beam extended lengthwise thereof, a metal plate secured to the ridge-beam and
35 having projecting edges forming troughs,

covers having hinged connection with the beam, the upper edges of said covers being curved to engage underneath said troughs, and beams extended from the ridge-beam to the sides of the car, the said beams being
40 channeled.

3. The combination with a car for coal or the like, of a ridge-beam thereon, a series of covers having hinged connection with the ridge-beam, each cover consisting of two
45 hinged sections, the upper edge of the lower section of a cover being curved upward, the lower edge of the upper section of a cover being curved to engage over the curve of the lower section, and channeled beams extended
50 from the ridge-beam to the sides of the car on which the edges of adjacent covers rest.

4. The combination with a coal-car, of a series of swinging covers therefor, hasps on the covers, staples secured to the body of the
55 car for engaging in said hasps, chains having connection with the car-body between the center staple and the outer staples, hooks on the outer ends of said chains for engaging the outer staples, rings on the inner ends of
60 said chains for engaging the center staple, and a lock for engaging with the center staple.

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

JOHN M. HETFIELD.

Witnesses:

PETER J. McDONOUGH,
GEO. N. KARNER.