

(No Model.)

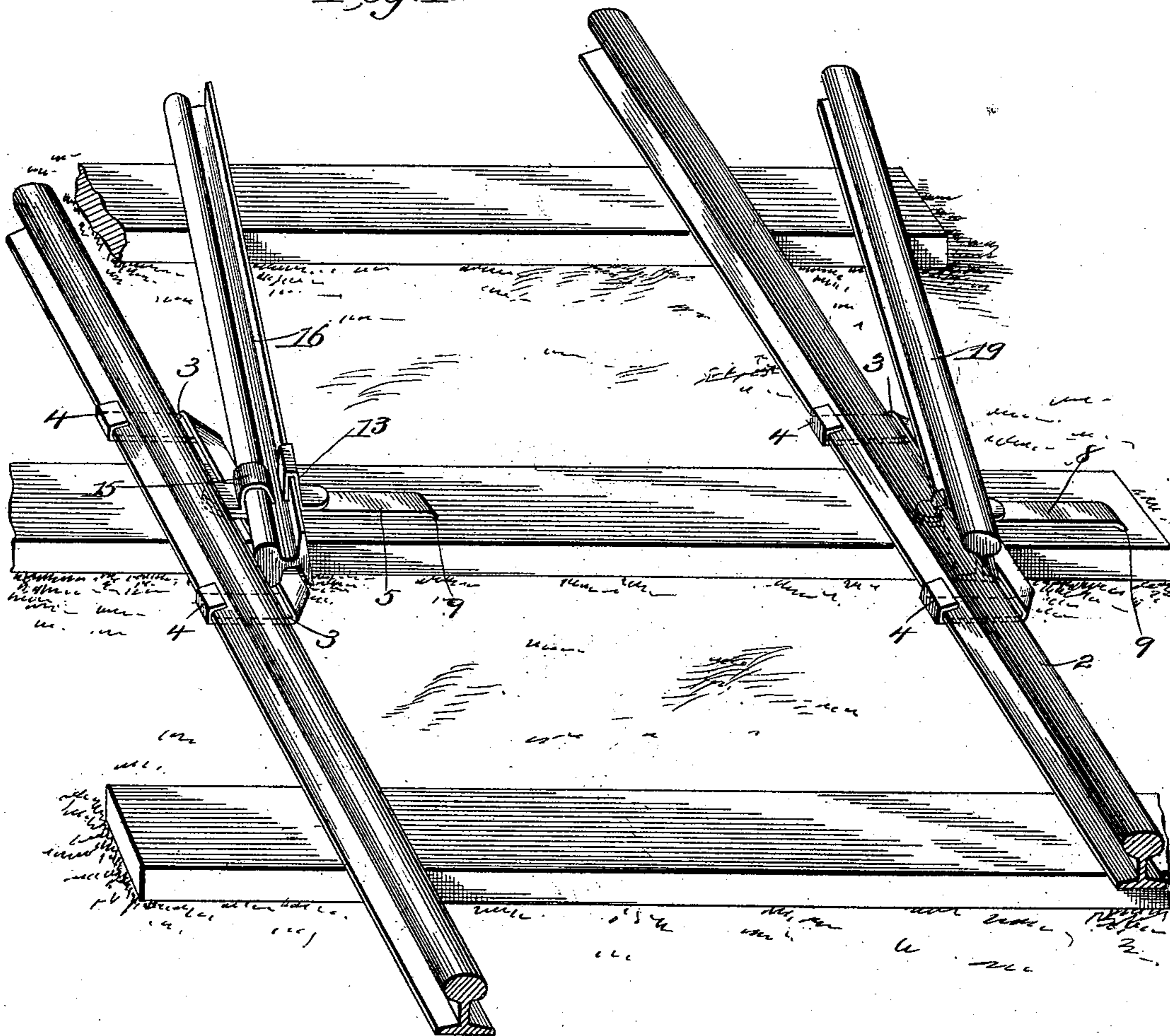
2 Sheets—Sheet 1.

W. C. BOURDETTE.  
WRECKING FROG.

No. 491,005.

Patented Jan. 31, 1893.

Fig. 1.



witnesses:  
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Inventor:  
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

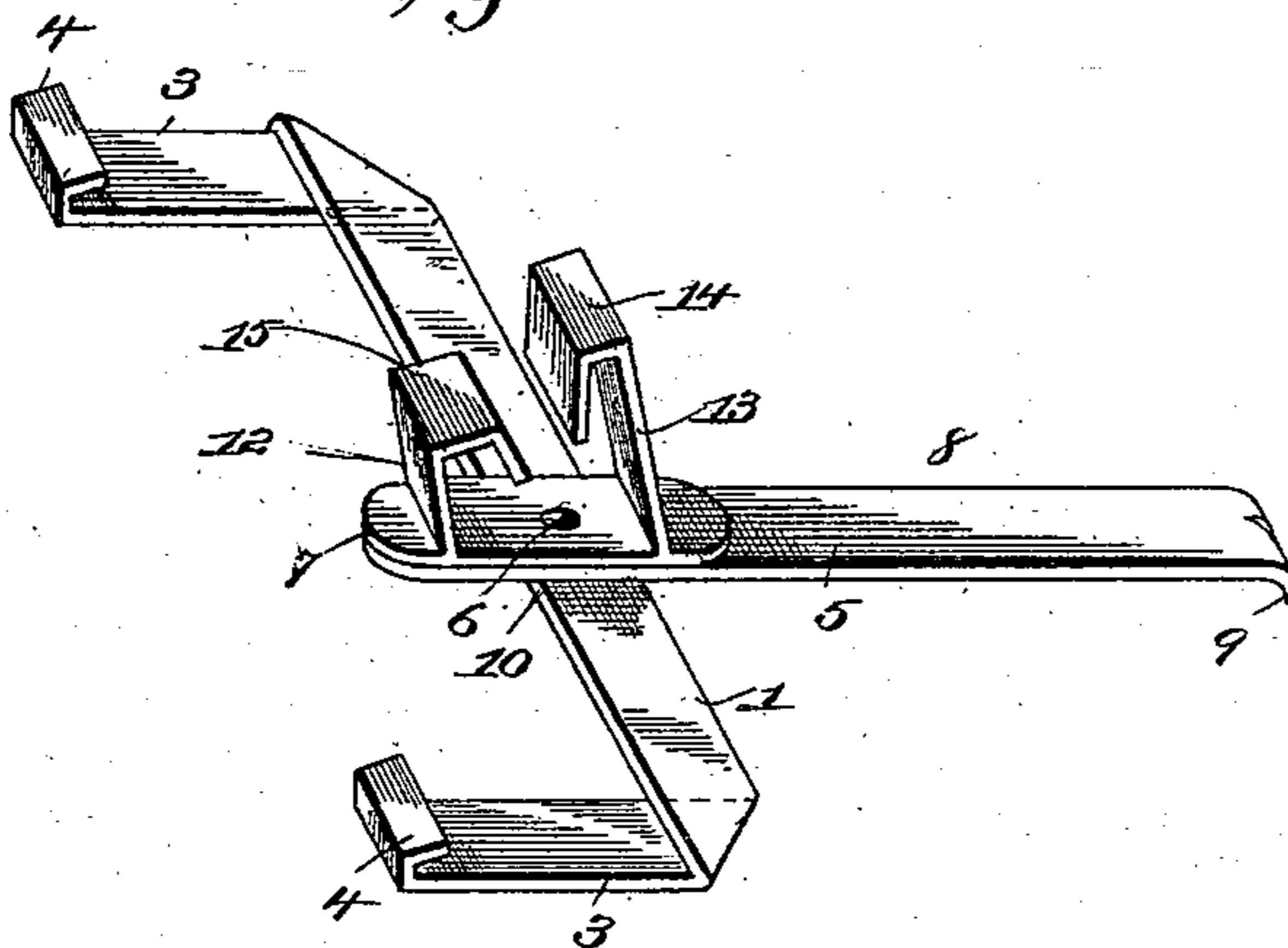
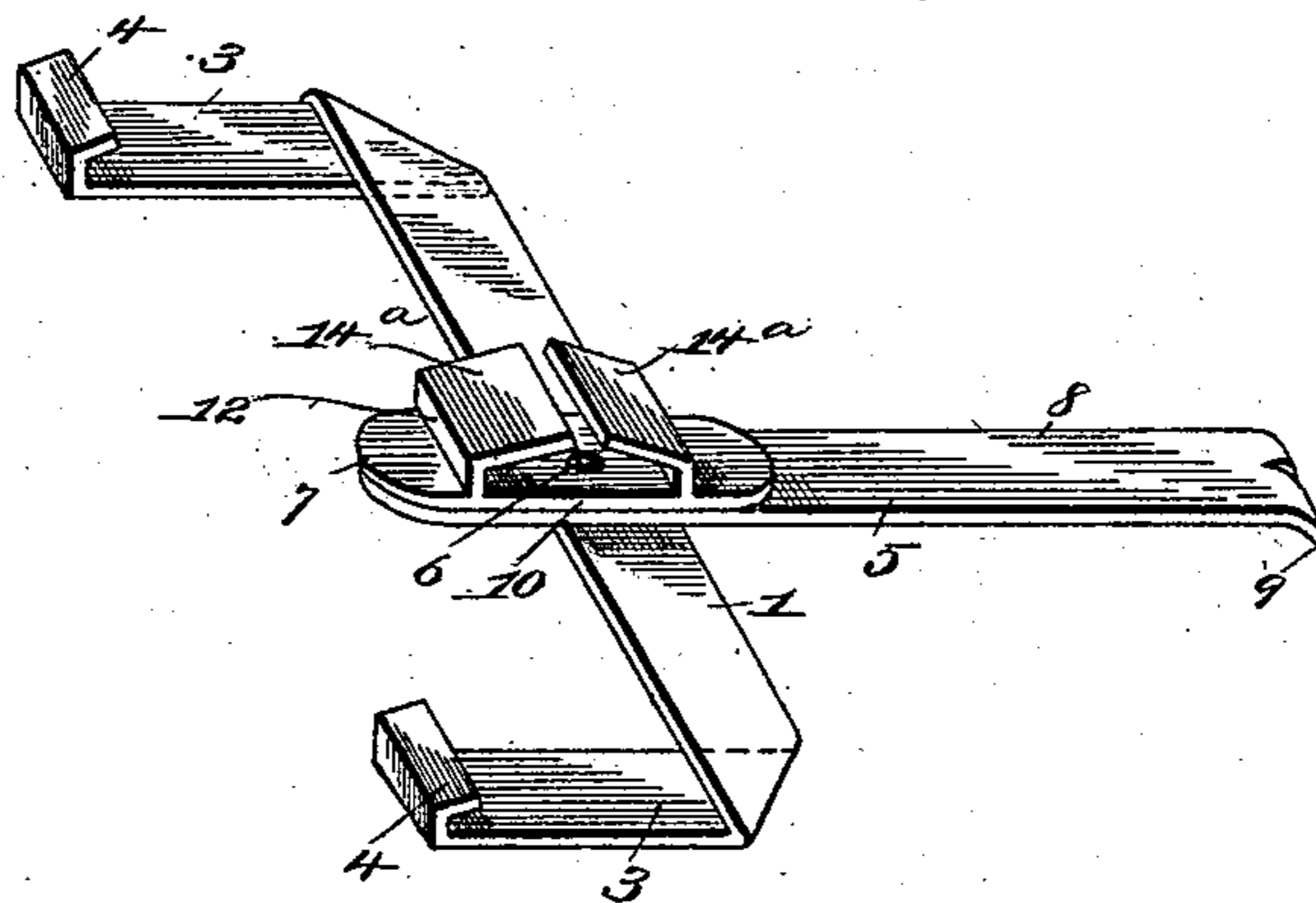


Fig. 3.



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# UNITED STATES PATENT OFFICE

WILLIS C. BOURDETTE, OF RIDGWAY, COLORADO.

## WRECKING-FROG.

SPECIFICATION forming part of Letters Patent No. 491,005, dated January 31, 1893.

Application filed September 8, 1892. Serial No. 445,324. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIS C. BOURDETTE, a citizen of the United States, residing at Ridgway, in the county of Ouray and State of Colorado, have invented new and useful Improvements in Wrecking-Frogs, of which the following is a specification.

This invention has for its objects to provide a new and improved wrecking frog or appliance for replacing derailed cars or engines on the track, and to provide a novel construction whereby an ordinary railway rail can be connected with the appliance to form an inclined frog which is susceptible of being adjusted laterally to any angle relative to the main line rail for the purpose of guiding and forcing the wheels at one side of a car into proper engagement with the main line rail at one side of the track, while the wheels at the opposite side of the car can be lifted over the main line rail which such wheels must cross in order to replace the car or engine.

The invention consists in the combination of a base frame adapted to rest on a cross tie and having arms to extend under and engage a main line rail, and a rotatable rail supporting shoe journaled on the base frame and having a pair of standards or arms of different height to engage the tread or ball and the base-flange of an ordinary railway rail so that the flanges of the car wheels travel on the rail-web between the tread or ball and the base-flange thereof.

The invention also consists in other features of construction and combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1, is a perspective view illustrating a pair of my improved wrecking frogs or appliances applied to a railway track for the purpose of replacing a derailed car or engine. Fig. 2, is a detail perspective view on a larger scale showing the improved appliance and omitting the rail which constitutes the frog to replace a car, and Fig. 3, is a similar view showing a variation in the form of the jaws for supporting an ordinary rail at a point outside one of the main line rails.

In order to enable those skilled in the art to make and use my invention I will now de-

scribe the same in detail, referring to the drawings where

The numeral 1 indicates a base-frame composed of a longitudinal portion adapted to extend parallel with a main line rail 2, and formed at its ends with lateral arms 3, having their extremities constructed with hooks 4, so that when the base frame is supported on a cross tie, the lateral arms 3 extend beneath the main line rail and the hooks 4 engage the base-flange of such rail. A horizontal bar 5 is pivoted to the base-frame through the medium of a pivot pin 6, in such manner as to form a short arm 7, and a long arm 8, the latter being provided at its extremity with spurs 9 to engage the cross-tie and thereby clamp the base-frame in engagement with a main line rail. A rail supporting shoe is journaled to the base frame by the pivot pin 6 and as here illustrated this shoe is composed of a horizontal base portion 10, and upright standards or arms 12 and 13, of different heights. The upper ends of the standards or arms are formed or otherwise provided with hooks 14 and 15, in such manner that an ordinary railway rail 16, can be placed in the shoe so that the tread or ball portion 17 of such rail engages the hook 15 while the base-flange 18 engages the hook 14. By this construction the rail 16 is so supported as to constitute an inclined frog so that the wheels at one side of a car can be caused to travel on the web portion between the tread or ball 17 and the base-flange 18, for the purpose of guiding and forcing the car wheels upon a main line rail.

The horizontal bar 5 is adapted to be turned into a position parallel with the longitudinal portion of the base frame for the purpose of folding the appliance when not in use, but the rail supporting shoe is susceptible of being rotated on or with the pivot pin 6 independent of any movement of the bar so that when the latter stands at right angles to the main line rail and is engaged with the cross tie to clamp the base frame 1 in proper position, the rail supporting shoe can be turned into any desired position for adjusting the rail 16 into any position relatively to the main line rail which circumstances may demand.

The construction of the wrecking frog or

appliance exhibited by Fig. 2 is employed at the inner side of one of the main line rails. The frog or appliance used at the outside of the other main line rail is constructed in all respects the same as hereinbefore described except that the hooks or hooked portions 14<sup>a</sup> are adapted to engage the base of an ordinary rail 19.

In practice the wrecking frogs or appliances are used in pairs as illustrated in Fig. 1, one frog holding the rail 16 which rests on its side as before explained, to allow the flange of a wheel to run in the space between the tread or ball and the base-flange, and the other frog holding an ordinary rail 19, in its normal position for the purpose of raising the wheel that must cross one of the main line rails. In this operation the rail 16 guides and forces the car laterally and causes it to be properly placed on the track.

The base frame, pivot bar and rotatable shoe may be composed of any material suitable for the conditions required, but cast or wrought iron is preferable for the purpose of securing the strength necessary in this class of appliances.

Having thus described my invention what I claim is—

1. The combination with a base frame adapted to rest on a cross-tie and extend under and engage a main line rail, of a rotatable shoe journaled on the base frame and having a pair

of hooked standards or arms of different height to engage the tread or ball and the base flange of an ordinary railway rail so that the latter constitutes an inclined frog for replacing a car or engine, substantially as described.

2. The combination with a base frame adapted to rest on a cross tie and having hooked arms to extend under and engage a main line rail, of a rotatable shoe journaled on the base frame and having a pair of standards or arms to engage the tread or ball and the base flange of an ordinary railway rail so that the latter constitutes an inclined frog for replacing a car or engine, substantially as described.

3. The combination with a base frame adapted to rest on a cross tie and extend under and engage a main line rail, of a bar pivoted intermediate its ends to the base frame, and a rotatable shoe having a pair of hooked standards or arms of different height to engage the tread or ball and the base-flange of an ordinary railway rail so that the latter constitutes an inclined frog for replacing the car or engine, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

WILLIS C. BOURDETTE. [L. S.]

Witnesses:

H. L. SWEET,

C. F. W. FELT.