No. 679,840. Patented Aug. 6, 1901.

J. E. GRAHAM.

STRUT FOR WRECKING CARS.

(Application filed Apr. 30, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1

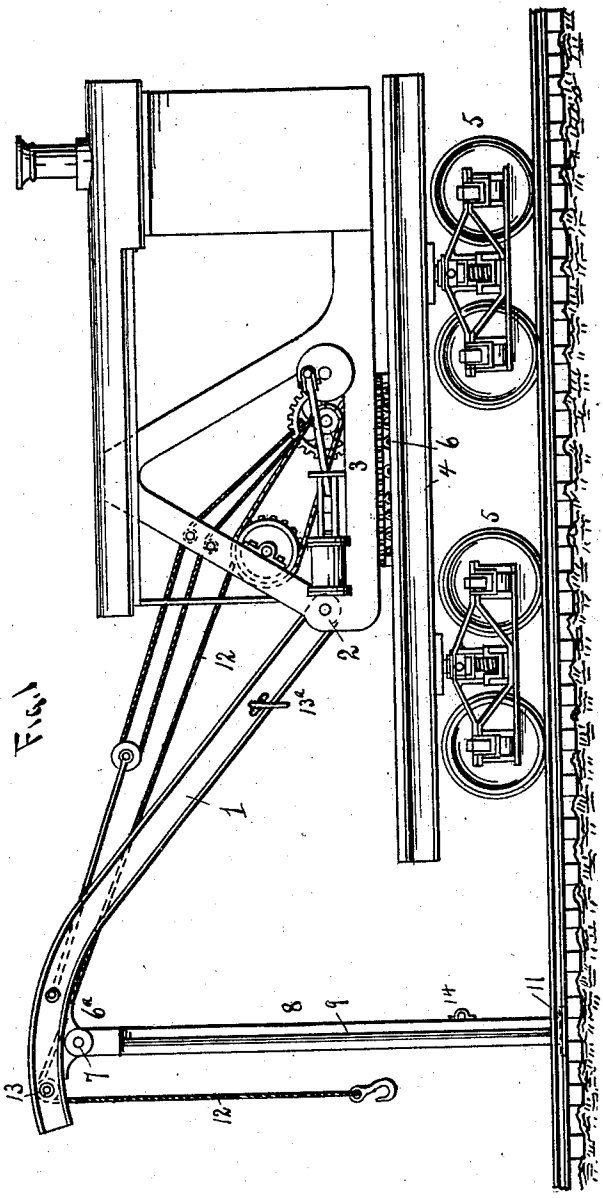
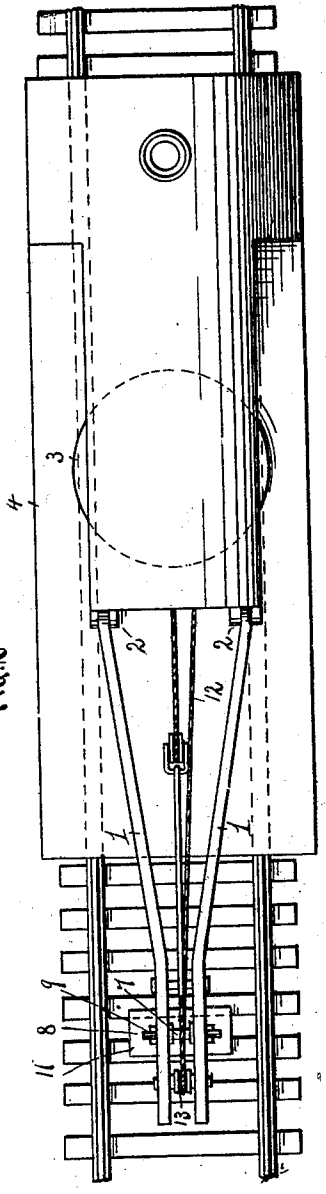


Fig. 2



Witnesses
C. M. Woodward
A. J. Riley

Inventor,
J. E. GRAHAM,
by C. A. Snow & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 679,840. Patented Aug. 6, 1901.

J. E. GRAHAM.

STRUT FOR WRECKING CARS.

(Application filed Apr. 30, 1901.)

(No Model.) 2 Sheets—Sheet 2.

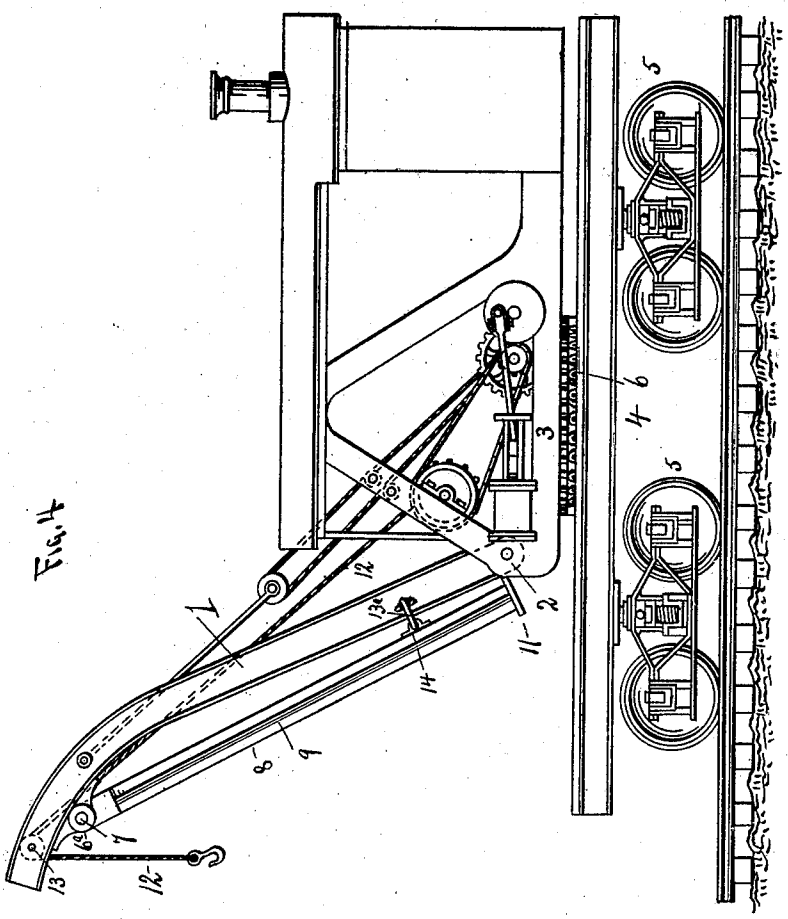


Fig. 4

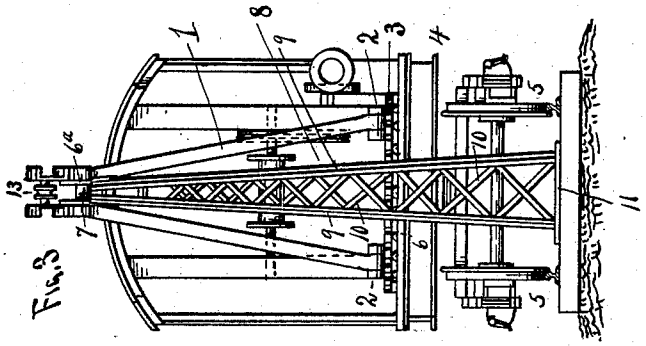


Fig. 3

Witnesses
C. M. Woodward.
T. J. Riley

J. E. GRAHAM, Inventor
by C. A. Snow & Co.,
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN ENGLE GRAHAM, OF ROANOKE, VIRGINIA.

STRUT FOR WRECKING-CARS.

SPECIFICATION forming part of Letters Patent No. 679,840, dated August 6, 1901.

Application filed April 30, 1901. Serial No. 58,169. (No model.)

To all whom it may concern:

Be it known that I, JOHN ENGLE GRAHAM, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented a new and useful Strut for Wrecking-Cars, of which the following is a specification.

The invention relates to improvements in railway wrecking-cars.

The object of the present invention is to improve the construction of railway wrecking-cars adapted to raise and remove heavy bodies and to provide a simple, inexpensive, and efficient device adapted to greatly increase the capacity of wrecking-cars for this purpose and capable of affording a firm support for the boom of a wrecking-car, whereby the latter will be prevented from being capsized or upset by any weight or strain to which the boom may be subjected.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of a wrecking-car constructed in accordance with this invention. Fig. 2 is a plan view of the same. Fig. 3 is an end elevation, the parts being arranged as shown in Fig. 1. Fig. 4 is a side elevation, the strut being folded against the boom.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates the boom of a wrecking-car, said boom being hinged or pivoted at its lower end 2 to a rotary frame or body 3, which is pivotally mounted on a truck-frame 4, and the latter is supported by wheels 5 in the ordinary manner. The rotary frame or body is supported by an annular series of antifriction-rollers 6 in the usual manner, and as these parts do not constitute any portion of the present invention they may be constructed in any suitable manner, and a detailed description thereof is deemed unnecessary. The boom, which is preferably constructed of channel-iron, is provided a suitable distance from its outer end with suitable ears or bearings 6^a for the reception of a pintle 7 for hinging a strut or post 8 to the boom. This strut or post 8, which is provided at its upper end with a suitble eye or opening for the pivot or pintle, is preferably constructed of channel-steel sides 9 and latticed braces 10, which connect the sides of the strut or post. The lower end of the strut or post is provided with a base-plate 11, and the sides converge therefrom to the upper end of the post or brace, which is preferably fitted between the ears or bearings of the boom, as illustrated in Fig. 3 of the accompanying drawings.

The boom is provided with the usual steel cable 12, depending from a suitable guide-pulley 13 at the outer end of the boom, and the said strut, post, or brace is located a sufficient distance from the cable to avoid interfering with the same. It is adapted to support the outer end of the boom, as clearly illustrated in Figs. 1 and 3 of the drawings, and it will relieve the wrecking-car of all strain tending to capsize or twist the same, and it will increase the capacity of wrecking-cars at least one hundred tons. The wrecking-car is designed to be provided with the usual mechanism for hoisting the cable and for controlling the boom to arrange the same at different inclinations. The strut or post may be arranged in a vertical position by blocking up its lower end, and the boom may be lowered to enable it to rest squarely upon the blocking or other support, and when so arranged the car is entirely relieved of strain. In light work the strut need not be employed, and it may be swung inward or folded against the boom, as illustrated in Fig. 4, to arrange it out of the way. Any suitable fastening device, such as a hook 13^a and an eye 14, may be employed for this purpose.

It will be seen that the strut, which is simple and inexpensive in construction, possesses great strength and durability and is adapted to be readily applied to the booms of wrecking-cars and that it will increase the lifting capacity of the same and enable heavy weights to be raised without straining or otherwise injuring the car. Also it will be clear that by this construction wrecking-cars may be constructed much lighter than heretofore, and the length of the booms and the consequent reach of the car may be greatly in-

creased. Furthermore, it will be apparent that the strut may be readily placed in operative position and that it can be arranged out of the way when its use is unnecessary.

What I claim is—

1. A wrecking-car having a boom, and provided with a folding strut or brace carried by the boom and arranged to support the outer end of the same, whereby the car will be relieved of strain and its capacity and reach increased, and means for securing the strut or brace in its folded position, substantially as described.

2. A wrecking-car having a pivoted boom, arranged to swing around the car, said car being also provided with a strut, hinged to and carried by the boom at the outer portion thereof and arranged to rest upon the ground or other support, whereby the wrecking-car is relieved of strain, said strut being adapted to be folded against the boom, substantially as described.

3. A wrecking-car having a boom, and provided with a hinged strut connected at its upper end to the boom near the outer end thereof and adapted to support the outer portion of the boom and capable of folding against the same, and a fastening device for locking the strut in its folded position, substantially as described.

4. A wrecking-car having a boom, and provided with a folding strut hinged to the outer portion of the boom and adapted to fold against the same and composed of a base, channel-steel sides converging upward from the base, and the latticed braces connecting the sides, and means for securing the strut in its folded position, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN ENGLE GRAHAM.

Witnesses:
R. B. WORTHAM,
J. B. NEWTON.