C. A. ROFE.

LIFTING IRON FOR MOTOR CARS.

APPLICATION FILED JULY 24, 1919.

1,421,993. Patented July 4, 1922.

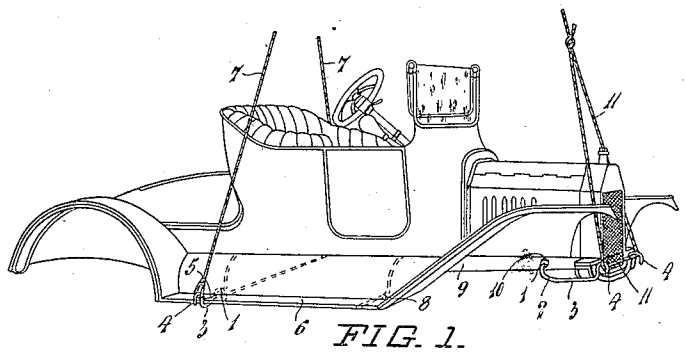


FIG. 1.

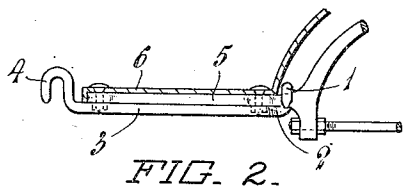


FIG. 2.

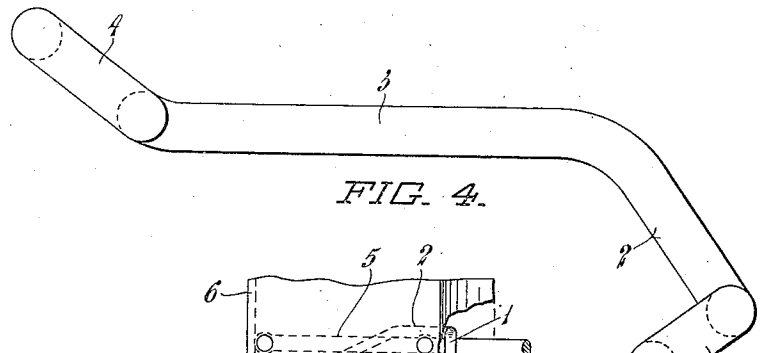


FIG. 4.

FIG. 3.

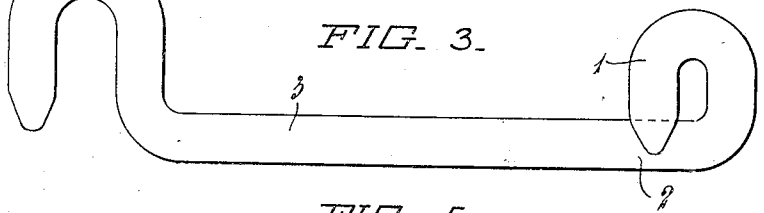


FIG. 5.

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LIFTING IRON FOR MOTOR CARS.

1,421,993. Specification of Letters Patent. Patented July 4, 1922.

Application filed July 24, 1919. Serial No. 313,078.

To all whom it may concern:

Be it known that I, CHARLES ALBERT ROFE, a citizen of the Dominion of New Zealand, and residing at Maunder Street, in the city of Marton, in Provincial District of Wellington, New Zealand, a subject of the King of Great Britain and Ireland, have invented certain new and useful Improvements in an Improved Lifting Iron for Motor Cars (for which I have filed application in Canada, Patent No. 200,671, granted June 1, 1920), of which the following is a specification.

This invention provides a lifting iron, the use of which facilitates the lifting of motor cars, either bodily or at either end for the purpose of enabling the wheels, axles or other parts of the car to be readily got at.

The lifting iron is more particularly adapted for use in a garage or repair shop and is made so as to be capable of being secured either to the brackets of the running boards or to the channel steel of the chassis.

The formation of the iron is such that when secured to a running board bracket, a hook at the inner end of the iron engages over the bracket near the root of same, and the stem passes beneath the bracket to relieve the board of undue strain, while a hook at the iron's outer end projects beyond the board, to enable lifting tackle to be attached thereto.

When the iron is secured to the channel steel of the chassis, it is used lengthwise at the side of the car near the front thereof, the inner hook of the iron engaging a web of the channel steel, and the stem of said iron passing beneath the front of the car, so that the hook at the outer end projects from the front of the car at one side of same.

The irons for lifting the rear end of the car are secured one at each side to the rear brackets of the running boards, and the irons for raising the front end either to the front brackets of the running boards, one at each side, or to the channel steel of the chassis, one at each side. When the irons are secured to the channel steel, their outer ends project from the car front, one at each side and are engaged by a rope attached to lifting tackle.

The invention will be more particularly described with reference to the accompanying drawing in which:—

Figure 1 illustrates by means of a perspective view the positions of the irons when lifting a car bodily.

Figure 2 is an enlarged cross sectional view of a running board and bracket, showing the engagement of an iron with the latter.

Figure 3 is a plan view (broken) of the parts illustrated in Figure 2.

Figures 4 and 5 are enlarged plan view and elevation respectively of a lifting iron.

The lifting iron comprises a stem having a body portion 3 bent horizontally at an obtuse angle adjacent one end to provide the extension 2 having the perpendicular hook 1 at right angles thereto. The free end of the hook 1 terminates in a plane with the body portion, as shown in Figs. 2 and 5. A perpendicular hook 4 is formed on the other end of the body 3, bent to lie in a plane approximately parallel with the extension 2.

When lifting the rear end of a car, an iron is attached to the rear bracket of each side running board 6, the hook 1 of each iron hooking on the bracket 5 near the root thereof, and the portions 2 lying below and to one side of the brackets, while the portions 3 pass beneath the brackets and the hooks 4 project beyond the board 6 at right angles to the car, one at each side.

Ropes 7 of lifting tackle are attached to the hooks 4, whereupon the rear end of the car can be raised to suit requirements, the brackets 5 relieving the boards 6 of undue strain.

For lifting the front end of the car irons can be attached to the front brackets 8 of the running board 6, in a similar manner to that just described, or said irons can be attached one at each side of the car to the channel steel 9 of the chassis by engaging each hook 1 in a hole 10 in a web of said channel steel, the irons lying approximately lengthwise in relation to the car with their portions 3 beneath the car front and the hooks 4 projecting beyond the same one at each side.

A rope 11 of lifting tackle is passed through the hooks 4 and joined overhead.

When a strain is placed on the rope 11 the outer ends of the irons connected thereto tend to draw together with the result that a firm hold is made of the front of the car.

Either end of the car can be raised by itself, or together with the other end.

What I do claim and desire to secure by Letters Patent of the United States of America is:—

A lifting iron comprising a body portion

and end portions, each of the end portions being offset at an angle to the body portion, and extending on opposite sides to each other, end hooks formed on the ends of the body portion, one of said hooks extending at substantially right angles to the end portions and the other within the same plane therewith, the said iron being adapted to be inserted in a substantially horizontal position beneath the running board of an automobile to engage with the bracket or chassis.

In testimony whereof I affix my signature.

CHARLES ALBERT ROFE.

Witnesses:

W. N. HAMMIS,

NORMAN S. LOW.