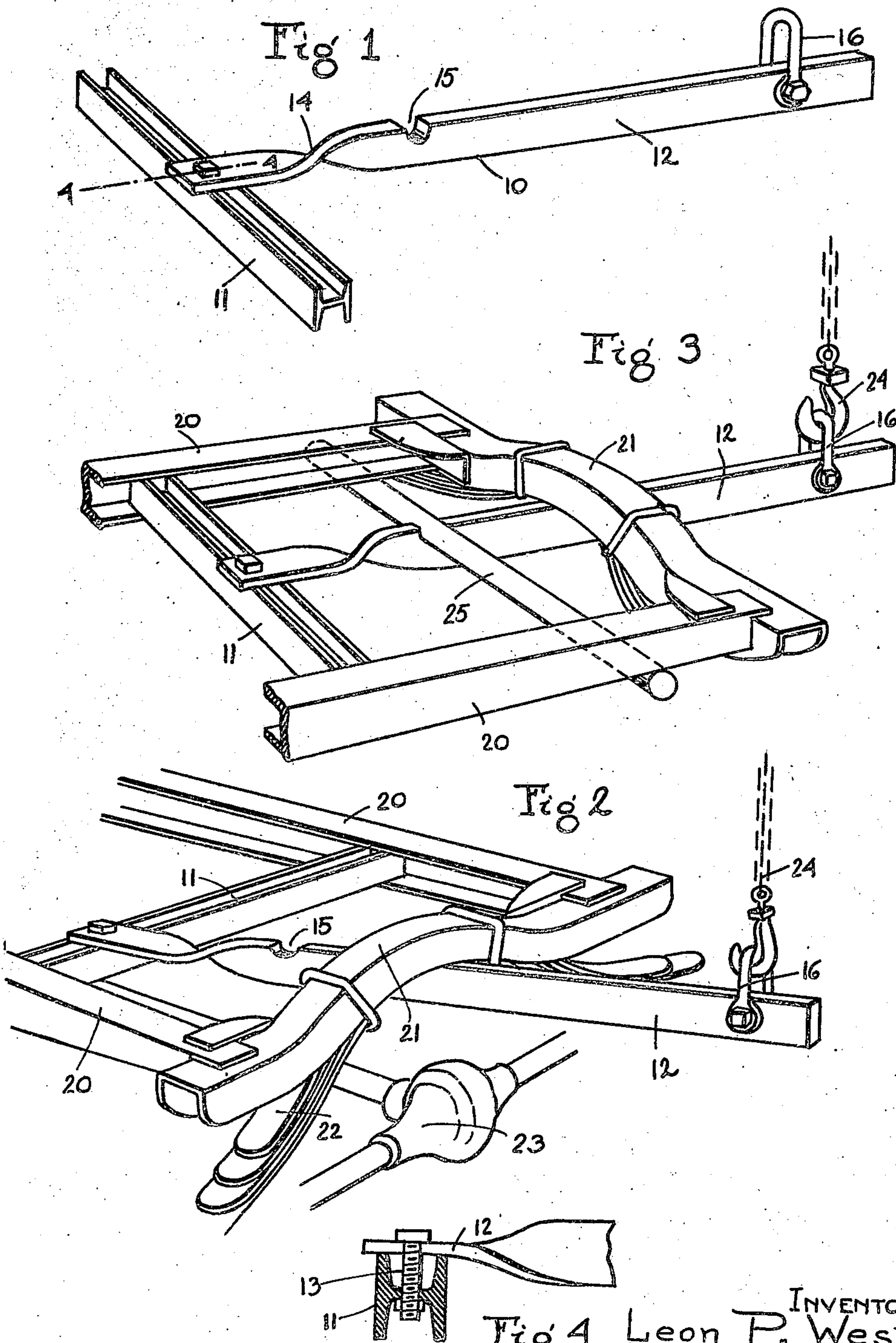


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L. P. WEST.
LIFTING HOIST.
FILED MAY 11, 1921.

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UNITED STATES PATENT OFFICE.

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LIFTING HOIST.

Application filed May 11, 1921. Serial No. 468,784.

To all whom it may concern:

Be it known that I, LEON P. WEST, a citizen of the United States, and resident of Buffalo, in the county of Erie and State of New York, have invented a certain new and useful Invention in Lifting Hoists, of which the following is a specification.

This invention relates to an improvement in lifting hoists, particularly in the type adapted to raise one end of a motor vehicle, and in the method of raising one end of such a vehicle.

It is often necessary in the repairing of motor vehicles to raise one end, usually the rear, in order to reach parts hidden when the vehicle is in its normal position. This is generally done by the use of a sling passed around the body of the vehicle by which the vehicle is raised but the body is often scarred.

One object of this invention is to provide means by which one end of a vehicle can be raised so that the axle can be repaired or removed, and by which the vehicle can be raised so that the springs can be repaired or removed, such means bearing only upon parts of the vehicle which are normally hidden and not upon the exposed parts.

Other objects will appear from an examination of the specification and of the drawings which form a part thereof and in which

Fig. 1 is a perspective view of one embodiment of this invention.

Fig. 2 is a perspective view showing one method of applying the invention to the chassis of a motor vehicle;

Fig. 3 is a view similar to Fig. 2 and showing a second method of applying; and

Fig. 4 is a cross section taken on the line 4-4 of Fig. 1.

Referring to the drawings the reference numeral 10 is used to designate a lifting hoist which forms one embodiment of my invention. This hoist comprises a cross bar or I-beam 11, a handle 12 pivotally secured to the cross bar, a nut and bolt mechanism 13 being shown in the drawing for so fixing the parts together. The handle 12 is preferably a rectangular bar twisted at right angles at 14 and having in its upper edge a notch 15 for a purpose to be described later. Adjacent the outer end of the handle is swung a hook 16 which is mounted far enough from the end of the handle so that it cannot swing over and so that the hoist will always be used in the position here shown.

Figs. 2 and 3 show the invention as ap-

plied to the rear end of a Ford chassis. The channelled side frame members 20 are joined at the outer end by a bowed channelled frame member 21. Within the member 21 are mounted the rear springs 22 by which the rear axle 23 is carried.

When it is necessary to raise the end of the vehicle to operate upon the axle the hoist is introduced below the springs and above the axle with the bar 11 swung substantially in line with the handle 12. After the proper distance has been reached the bar is swung on its pivot into engagement with the channelled side frame members 20. By means of a hook and chain 24 the hoist is raised, the handle bearing against the under side of the springs 22 and the frame 21. The axle 23 can now be reached without difficulty and the necessary repairs or replacements made.

If the spring is to be repaired or replaced it is of course necessary to use a method in which the handle does not bear against them. This is done by laying across the handle 12 and under the frame member 20 a bar 25 which rests in the notch 15. When the hoist is now raised as in Fig. 3 the handle bears through the bar 25 against the frame members 20 and the springs 22 can easily be operated upon.

While one embodiment only has been shown and described applicant is not to be limited thereby since it is obvious that others can be made without departing from the spirit and scope of the invention as set forth in the following claims.

Having thus set forth my invention that which I claim as new and for which I desire the protection of United States Letters Patent, is the following:

1. A lifting hoist comprising in combination a cross bar and a handle pivoted thereto, said bar being of such a length as to engage at each end the article to be lifted and said handle being adapted to bear against said article in cooperation with the ends of said bar.

2. A hoist for lifting motor vehicles having channelled side members and a cross member, comprising in combination a cross bar adapted to engage said channelled side members, and a handle secured to said bar adapted to bear against said cross member when the hoist is operated.

3. A hoist for lifting motor vehicles having channelled side members and a cross member, comprising in combination a cross

bar adapted to engage said channelled side members, and a handle pivoted to said bar adapted to bear against said cross member when the hoist is operated.

- 5 4. A hoist for lifting motor vehicles having channelled frame members comprising in combination a cross bar adapted to engage said channelled members, a handle on

said cross bar having a transverse notch in its upper edge and a rod resting in said notch and bearing against said channelled members.

In testimony whereof, I affix my signature.

LEON P. WEST.