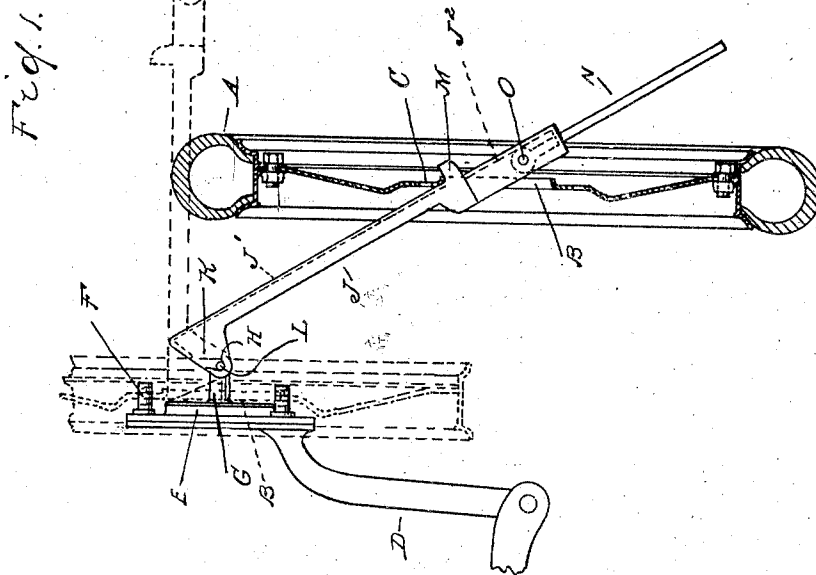
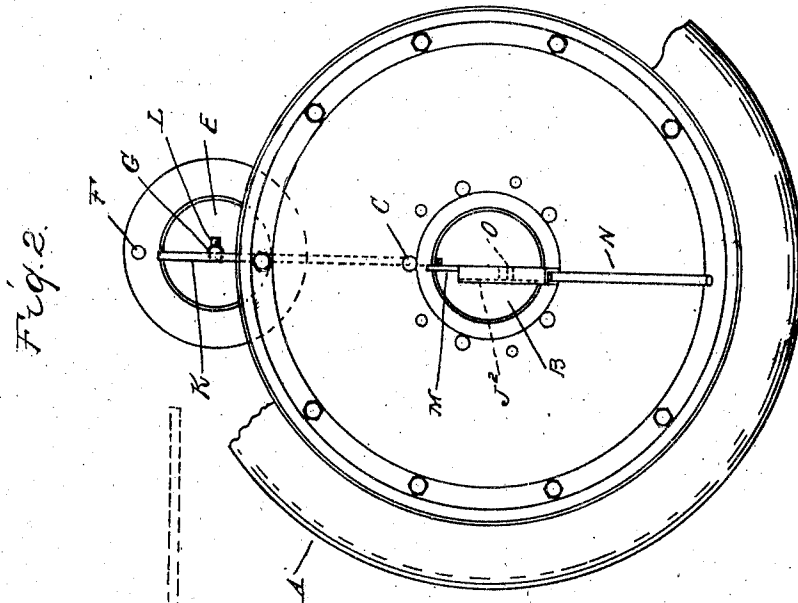


A. O. PELTIER.
 DEMOUNTABLE WHEEL LIFTING DEVICE.
 APPLICATION FILED OCT. 3, 1919.

1,349,581.

Patented Aug. 17, 1920.



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UNITED STATES PATENT OFFICE.

AUGUST O. PELTIER, OF DETROIT, MICHIGAN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO DETROIT PRESSED STEEL COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

DEMOUNTABLE-WHEEL-LIFTING DEVICE.

1,349,581.

Specification of Letters Patent.

Patented Aug. 17, 1920.

Application filed October 3, 1919. Serial No. 328,282.

To all whom it may concern:

Be it known that I, AUGUST O. PELTIER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Demountable-Wheel-Lifting Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to demountable wheels for vehicles and it is the object of the invention to lessen the labor of lifting the demounted wheel to engage the same with the carrying holder. To this end the invention consists in the construction as hereinafter set forth.

In the drawings:

Figure 1 is a side elevation showing a demountable wheel and the holder therefor, together with my lifting tool;

Fig. 2 is an end elevation.

A is a demountable wheel which, as shown, is of the disk type having a central hub-receiving aperture B, with a series of apertures C surrounding the same for engagement with the bolts clamping the wheel to the hub. D is a holder having a hub portion E for fitting within the aperture B and also provided with a series of studs F for registration with the aperture C. G is a central stud extending outward from the portion E and having near its outer end the transversely extending aperture H.

The holder as above described is normally located on the vehicle a considerable distance above the ground, so that it is necessary to lift the wheel for engagement therewith. Where large heavy wheels are employed, the labor of lifting to this holder is considerable, so as to render it difficult for one person unaided to effect such a mounting. I have therefore devised a tool for assisting in lifting the wheel, constructed as follows:

J is a bar having at one end thereof a laterally extending portion K having a pin L projecting therefrom and engageable with the aperture H in the stud G. The distance between the center of this pin L and the outer edge of the bar J is substantially equal to the radius of the aperture in the disk, so that when the bar extends horizontally its upper edge will be in substantial alignment with the upper edge of the hub E for

supporting the disk. The bar J is of a length to extend from its point of engagement with the stud G downward in an inclined direction through the aperture in the disk when the demountable wheel is resting upon the ground. The bar is also provided with a laterally-projecting lug M for engaging the upper edge of said aperture in the disk. Thus when the bar is in this position, as shown in full lines in Fig. 1, its lower end can be grasped by the operator and lifted, the bar acting as a lever of the second class which is fulcrumed upon the pin L. In this way the wheel may be lifted until the bar is in substantially horizontal position, as shown in dotted lines, whereupon the operator may push the wheel inward on the bar until the studs F engage the apertures C and support the weight of the wheel. The bar J may then be detached from the stud G and the disk clamped to the holder.

To facilitate the carrying of the tool it is preferably formed in foldable sections and as shown N is an extension portion of the bar which is pivotally secured at O. The bar J is preferably formed of pressed sheet metal having an angle section in the portion J' thereof and a channel section in the portion J², in which the extension member N is pivoted.

What I claim as my invention is:

1. A demountable wheel lifting tool comprising a bar adapted to be inserted obliquely through the hub aperture in the wheel, means at the upper end of said bar for forming the fulcrum engagement with the tire holder, and a bearing on said bar for engaging the wheel, whereby said bar may be actuated as a lever of the second class to lift the wheel into alinement with the holder.

2. The combination with an elevated wheel holder having a hub portion for engaging the hub aperture of the wheel, of a tool for lifting the wheel comprising a bar for insertion diagonally through the hub aperture in said wheel when resting on the ground, the upper end of said bar having a fulcrumed engagement with said holder, and a bearing on said bar for engaging said wheel at the upper edge of the aperture therein, whereby said bar may be operated as a lever of the second class to lift the wheel into alinement with said hub bearing.

3. The combination with an elevated

holder for demountable wheels having a hub portion for engaging the hub aperture in said wheel, of a lifting tool comprising a bar adapted for insertion diagonally from said hub aperture in the wheel while resting on the ground, the upper end of said bar having a fulcrum bearing on said holder, a lug projecting from said bar for engaging said wheel at the upper edge of said aperture, and a handle portion at the lower end of said bar for lifting the same into substantially horizontal position, said wheel being slidable on said bar into engagement with its holder.

4. The combination with an elevated demountable wheel holder, comprising a hub portion for engaging the hub aperture of the wheel, and a stud extending axially outward from said hub portion, of a lifting tool comprising a bar insertible diagonally through the hub aperture in said wheel when resting on the ground, the upper end of said bar being provided with a fulcrum bearing for

engaging said outwardly extending stud, said bearing being laterally deflected to align the upper edge of the bar with the upper edge of the hub bearing when the former is in substantially horizontal position, a bearing on said bar for engaging said wheel at the outer edge of the aperture therein, and a handle portion at the lower end of said bar for lifting the same and the wheel when operated as a lever of the second class.

5. A lifting tool for demountable wheels comprising a pressed sheet metal structure having a lateral extension at one end thereof and a pin projecting outward therefrom, and a lug projecting laterally from another portion of said bar on an extension portion of said bar which may be collapsed for storage, all substantially as and for the purpose set forth.

In testimony whereof I affix my signature.

AUGUST O. PELTIER.