P. E. ERICKSON.

LUBRICATOR FOR LEAF SPRINGS.

APPLICATION FILED MAY 19, 1914.

1,127,214. Patented Feb. 2, 1915.

Fig. 1.

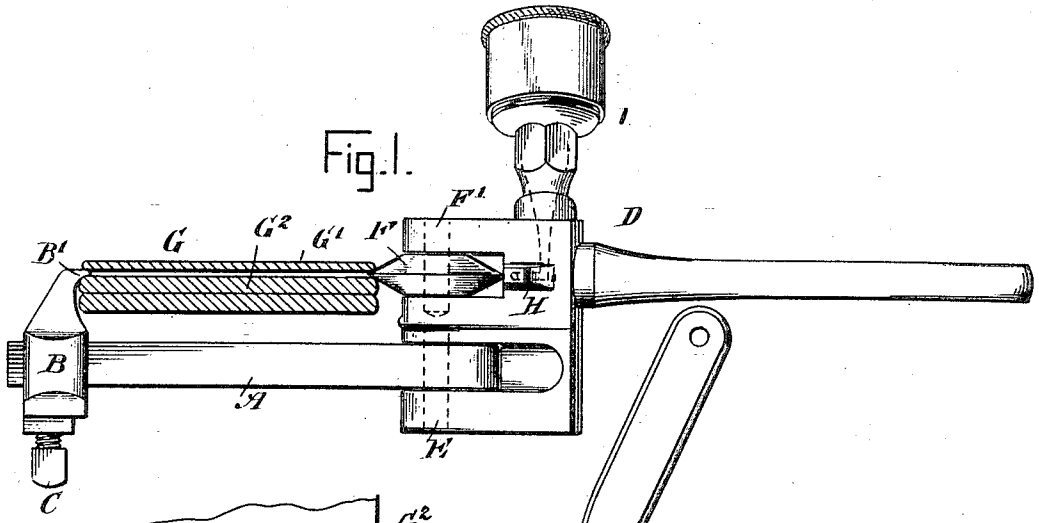


Fig. 2.

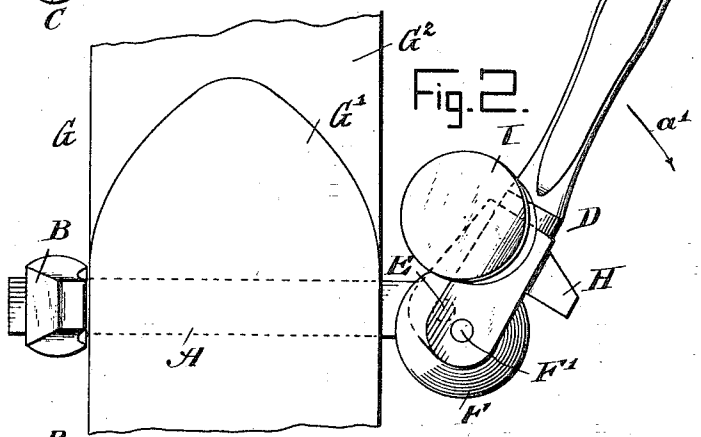


Fig. 3.

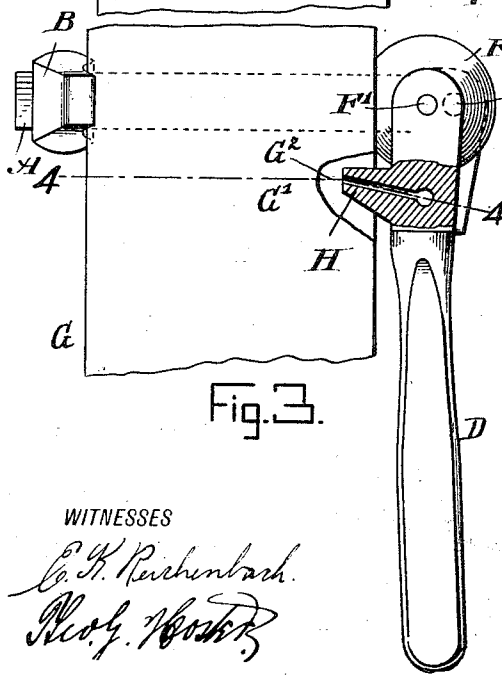
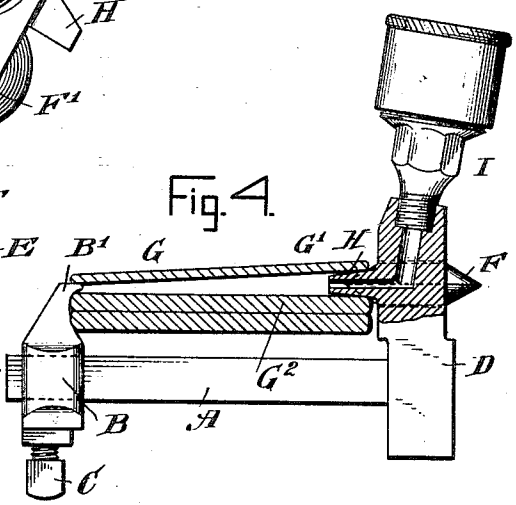


Fig. 4.



WITNESSES

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LUBRICATOR FOR LEAF-SPRINGS.

1,127,214. Specification of Letters Patent. Patented Feb. 2, 1915.

Application filed May 19, 1914. Serial No. 839,513.

To all whom it may concern:

Be it known that I, PETER E. ERICKSON, a citizen of the United States, and a resident of Port Chester, in the county of Westchester and State of New York, have invented a new and Improved Lubricator for Leaf-Springs, of which the following is a full, clear, and exact description.

The invention relates to lubricators for leaf springs, such as shown and described in the application for Letters Patent of the United States, Serial No. 817,786, filed by me on February 10, 1914.

The object of the present invention is to provide a new and improved lubricator for leaf springs of automobiles and other vehicles, and arranged to permit of conveniently and quickly prying the leaves apart and passing a lubricant between the opened leaves to prevent the leaf spring from squeaking and to reduce the wear thereof to a minimum. In order to accomplish the desired result use is made of a lever fulcrumed on a support and carrying a prying member adapted to pass between adjacent leaves to pry the same open on actuating the said lever, and a lubricant supply nozzle mounted on the said lever to one side of the prying member to pass between the leaves after the same have been opened by the prying member.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the lubricator as applied and showing the leaves in cross section and partly pried open; Fig. 2 is a plan view of the same with the parts in position prior to prying the leaves open; Fig. 3 is a similar view of the same with the leaves pried open and the lubricant supply nozzle in active position between the open leaves, the supply nozzle being shown in section and part of the upper leaf of the spring being broken out; and Fig. 4 is a sectional side elevation of the same on the line 4—4 of Fig. 3.

The lubricating device is mounted on a support A, preferably in the form of a rod or a bar, on one end of which is adjustably secured a spreading member B by the use of a set screw C. A hand lever D is mounted to swing on a pivot E held at the other end of the support A, and on this hand lever D is journaled a prying member F in the form of a wheel having a V-shaped peripheral face and turning on a pin F′ attached to the lever D. The pin F′ is disposed eccentrically relative to the pivot or fulcrum E of the hand lever D so that when the hand lever is in the position shown in Fig. 2 then the peripheral face of the prying wheel F is a distance to one side of the members G′, G² of the leaf spring G to be opened, but when the hand lever D is swung around in the direction of the arrow *a′* then the peripheral sharp edge of the wheel F passes between the leaves G′, G² thus spreading the same apart at the same time drawing the lip B′ of the spreading member B between the leaves G′, G² at the opposite side of the leaf spring, as plainly indicated in Fig. 1. On further movement of the hand lever D in the direction of the arrow *a′* the leaves G′, G² are widely opened at this side of the leaf spring, as plainly indicated in Fig. 4.

On the lever D to one side of the wheel F but approximately in the plane of the wheel is arranged a nozzle H adapted to pass between the leaves G′, G² after the same have been opened by the wheel F. The nozzle H is in communication with a lubricant container or grease cup I, of any approved construction, and mounted on the top of the lever D. It is understood that when the nozzle H is in position between the leaves G′, G² then the operator screws up the cover of the container I to force some of the lubricant out of the container and by way of the nozzle H between the leaves G′, G² to lubricate the same. When this has been done the operator swings the lever D back into former position whereby the nozzle H passes out between the leaves G′, G², and then the leaves are gradually released by the wheel F as the latter passes out from between the leaves G′, G². A lateral push on the lever D readily disengages the lip B′ from the leaves G′, G² at the other side of the leaf spring G.

It will be noticed that when the device is used for prying leaves G′, G² open, the wheel F engages the leaves with a rolling contact so that the leaves are gradually opened without requiring much physical exertion on the part of the operator, and after the leaves have been opened the nozzle H passes between the leaves to permit of

delivering a lubricant in the space between them.

By adjustably mounting the spreading or prying member B on the support A, the device can be readily adjusted for springs of different width although a slight variation of the springs does not make any difference as the bodily movement or throw of the wheel F is sufficient to pry the leaves G′ and G^2 open.

As shown in the drawings, the nozzle H forms an integral part of the lever D, but such construction is not essential as the nozzle may be a separate member screwed or otherwise attached to the lever D.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A lubricating device for lubricating leaf springs, comprising a support, a prying member attached to one end of the said support, a lever mounted to swing on the other end of the said support, a prying member on the said lever, the said prying members being adapted to pass between adjacent leaves to pry the same apart on actuating the said lever, and means for passing a lubricant between the open leaves.

2. A lubricating device for lubricating leaf springs, comprising a support, a prying member secured to one end of the said support, a hand lever fulcrumed on the other end of the said support, a prying wheel having a sharp peripheral edge and journaled on the said hand lever, a nozzle on the said lever in alinement with the said wheel, and a lubricant container mounted on the said lever and in communication with the said nozzle.

3. A lubricating device for lubricating leaf springs, comprising a support, a prying member secured to one end of the said support, a hand lever fulcrumed on the other end of the said support, a prying wheel having a sharp peripheral edge and journaled on the said lever eccentrically relative to the fulcrum thereof, the said prying member and the said prying wheel being adapted to pass between adjacent leaves at opposite sides of the leaf spring to pry the leaves open on actuating the said hand lever, and means for passing a lubricant between the open leaves.

4. A lubricating device for lubricating leaf springs comprising a support, a prying member secured to one end of the said support, a hand lever fulcrumed on the other end of the said support, a prying wheel having a sharp peripheral edge and journaled on the said lever eccentrically relative to the fulcrum thereof, the said prying member and the said prying wheel being adapted to pass between adjacent leaves at opposite sides of the leaf spring to pry the leaves open on actuating the said hand lever, a nozzle on the said hand lever and disposed in the plane of the said prying wheel, and a lubricant container mounted on the said hand lever and in communication with the said nozzle.

5. A lubricating device for lubricating leaf springs provided with a prying member in the form of a wheel having a sharp peripheral edge, and means for bodily moving the said wheel to engage the edge thereof by rolling contact with adjacent leaves to pry the same open.

6. A lubricating device for lubricating leaf springs provided with a support, a lever fulcrumed on the said support, and a prying wheel journaled on the said lever, the axis of the wheel being eccentric to the fulcrum of the said lever.

7. A lubricating device for lubricating leaf springs provided with a support, a lever fulcrumed on the said support, a prying wheel journaled on the said lever, the axis of the wheel being eccentric to the fulcrum of the said lever, a nozzle on the said lever to one side of the said wheel and extending in the plane thereof, and a lubricant container mounted on the said lever and in communication with the said nozzle.

8. A lubricating device for lubricating leaf springs, comprising a support, a lever fulcrumed on the said support, a prying member on the said lever and adapted to pass between adjacent leaves to pry the same open on actuating the said lever, and a lubricant supply nozzle mounted on the said lever to one side of the said prying member to pass between the leaves after the same have been opened by the said prying member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER E. ERICKSON.

Witnesses:

ALFRED V. ERICKSON.

LOUIS C. A. LEWIN.