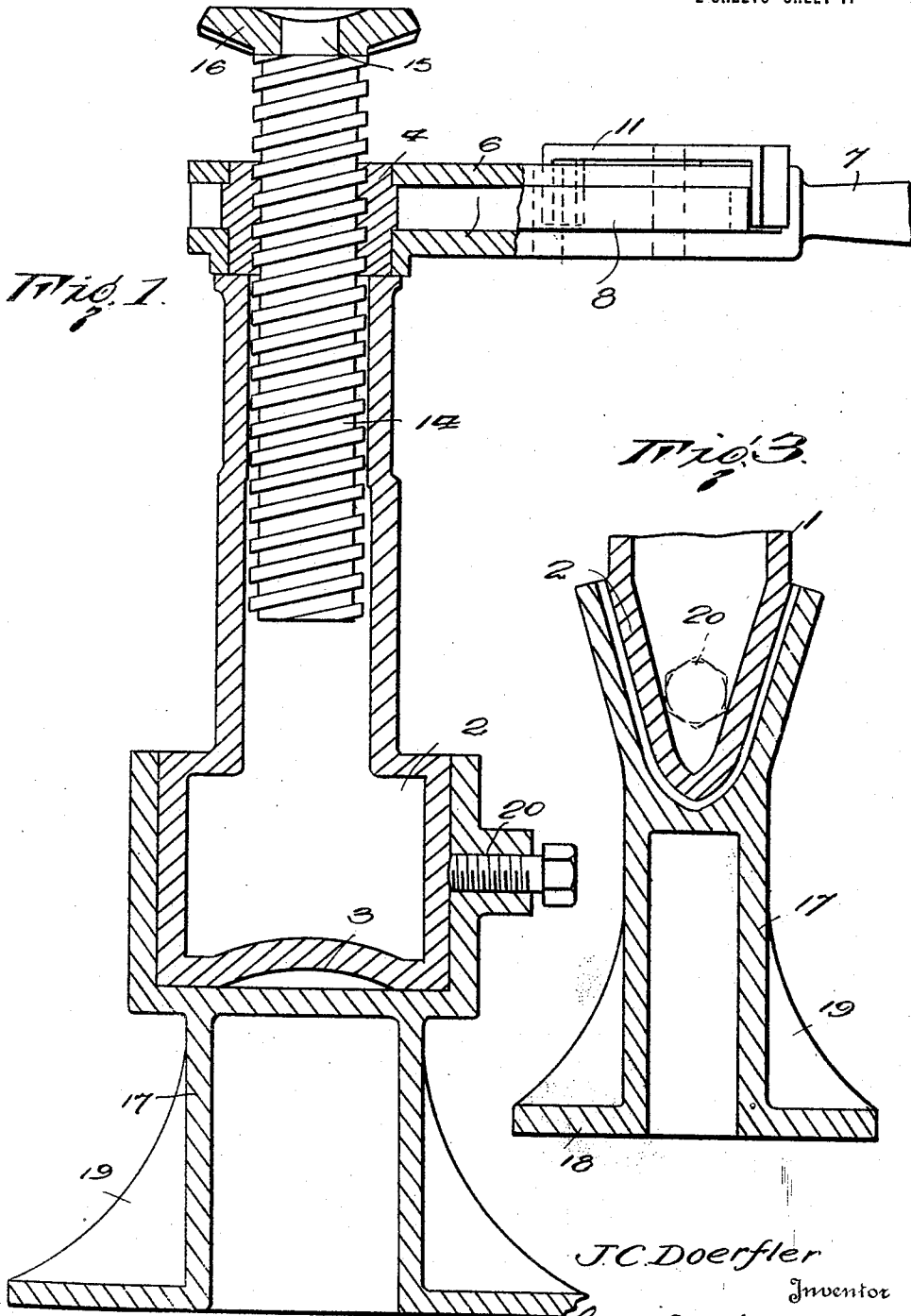


J. C. DOERFLER.
 AUTOMOBILE JACK.
 APPLICATION FILED MAY 1, 1918.

1,304,460.

Patented May 20, 1919.
 2 SHEETS—SHEET 1.

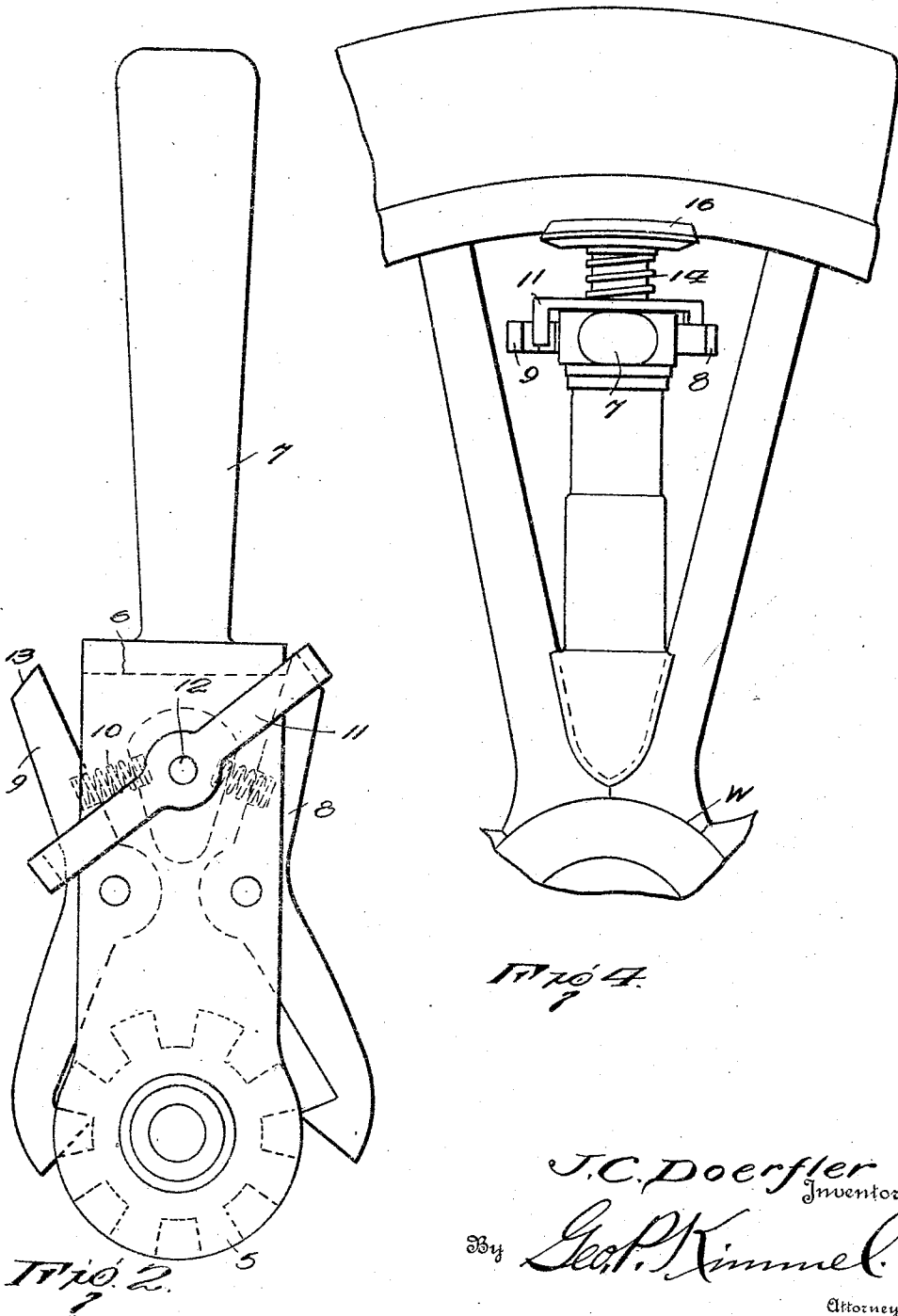


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 Inventor
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 Attorney

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UNITED STATES PATENT OFFICE.

JOHN C. DOERFLER, OF GOLDFIELD, NEVADA.

AUTOMOBILE-JACK.

Specification of Letters Patent.

Patented May 20, 1919.

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Application filed May 1, 1918. Serial No. 231,914.

To all whom it may concern:

Be it known that I, JOHN C. DOERFLER, a citizen of the United States, residing at Goldfield, in the county of Esmeralda and State of Nevada, have invented certain new and useful Improvements in Automobile-Jacks, of which the following is a specification.

This invention relates to improvements in jacks and it is the principal object of the invention to provide a jack which can be used for lifting various objects and by slight alteration, used in connection with wheelwright work, such as the removal of undue movement between the spokes and felly of a wheel, frequently caused by the shrinking or warping of the same and in this way materially strengthen the same as well as eliminate the undesirable creaking thereof.

Another and equally important object of the invention is to provide the jack with a novel form of base which will serve to support the same for ordinary uses but which can be readily removed to permit arrangement of the jack between the hub and felly of a wheel.

Other objects will be in part obvious and in part pointed out hereinafter.

In order that the invention and the manner of its application may be readily understood by those skilled in the art, I have in the accompanying illustrative drawings and in the detailed following description based thereon set forth a preferred embodiment of the invention.

In the drawings:

Figure 1 is a vertical section through the improved jack,

Fig. 2 is a top plan thereof showing the saddle removed,

Fig. 3 is a fragmentary section through the lower portion of the jack taken at right angles to the Fig. 1, and

Fig. 4 is a fragmentary side elevation of a wheel having the improved jack arranged between the spokes and felly thereof.

Having more particular reference to the drawings, in connection with which like reference characters will designate corresponding parts throughout the several views, W designates the fragment of the wheel illustrated in its entirety and upon

which the improved jack is adapted for use at times.

The improved jack includes a stand 1, having an enlarged lower portion 2, which as will be noted, is substantially wedge shaped in cross section and has its opposite sides formed concave or channeled as indicated by the numeral 3, whereby the same can be snugly arranged between the spokes of the wheel W, at times. Upon the upper end of the tubular stand 1 a screw threaded sleeve 4 is rotatably mounted and as will be noted, has its peripheral portion formed to constitute the usual ratchet indicated by the numeral 5, while spaced superposed arms 6 extend laterally therefrom and serve to support a handle 7. Pawls 8 and 9 are pivoted between the lateral arms 6 and have the free ends thereof engaged by expansible coil springs 10 arranged between the arms 6 and as a consequence, are normally moved into engagement with the ratchet element 5. To maintain one of the pivoted pawls out of engagement with the ratchet element 5 and to permit the remaining pawl to be engaged therewith, a substantially U-shaped locking arm 11 is pivotally mounted on the lateral arms 6 as at 12 and has the opposite extremity thereof so arranged as to engage portions of the pawls when moved to positions such as shown in the Fig. 2, it being noted in this connection, that the portions of the pawls 8 and 9 engaged by the extremities of the locking arm are beveled as at 13 for an obvious purpose.

Engaged with the screw threaded sleeve 4 and extending downwardly into the tubular stand 1 is the ordinary screw threaded rod or shaft 14, the upper portion of which is provided with a vertically disposed bearing pin 15 in order that a saddle 16 can be engaged therewith.

For supporting the jack during ordinary use, I provide a base or foot 17, the lower portion of which is flanged as at 18 and braced by webs 19, while the upper portion thereof is enlarged to provide a pocket for snugly receiving the wedge shaped lower end 2 of said stand 1. Formed in one side of the enlarged upper end of the base 17 is a screw threaded opening receiving a locking screw 20 therethrough, which as

will be noted, is adapted to be turned into engagement with an adjacent portion of the enlarged lower end 2 of the stand, thus, serving as means for locking said stand in engagement with its base or foot.

In operation, when using the jack for ordinary uses, the base 17 is connected to the enlarged lower end of the stand and the handle 7 rocked to cause the lifting of an object arranged in the saddle 16. To permit the lowering of the object, the locking arm 11 is moved to a reverse position, thus releasing the previously locked pivoted pawl and locking the remaining pawl in disengaged position, whereupon the handle 7 is rocked in the proper direction. Should it be desired to employ the jack as a means for expanding the felly of a wheel in order that suitable wear compensating means may be engaged between the same and the spokes thereof to prevent undue movement, the base 17 is now disengaged from the stand by loosening the locking screw 20. At this time, the stand is arranged between the wheel spokes as clearly shown in the Fig. 4, the wedge shaped portion 2 fitting between the lower portions of the wheel spokes, while the channeled parts 3 thereof snugly engage said portion. The handle 7 is now rocked to cause elevation of the screw threaded rod

14 and the resultant engagement of the saddle 16 with the adjacent portion of the wheel felly, thereby forcing the same apart and permitting the introduction of a suitable compensating device between the tensions of the spokes and the adjacent portions of said felly.

Manifestly, the construction shown is capable of considerable modification and such modification as is within the scope of my claim, I consider within the spirit of my invention.

I claim:

In a jack of the character described, a stand, lifting means arranged in the stand, means for raising and lowering said lifting means, an enlarged wedge shaped foot on the lower end of the stand and having the opposed inclined side and lower faces concave, and a base having a wedge shaped pocket in its upper end designed to snugly and removably receive the correspondingly shaped foot, and means mounted in the base and extending through one wall of the pocket and engageable with the foot to releasably hold the foot against accidental displacement.

In testimony whereof, I affix my signature hereto.

JOHN C. DOERFLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."