No. 606,929. Patented July 5, 1898.

T. F. LEAK & R. WEST.

TIRE TIGHTENER.

(Application filed June 14, 1897.)

(No Model.)

FIG. 1.

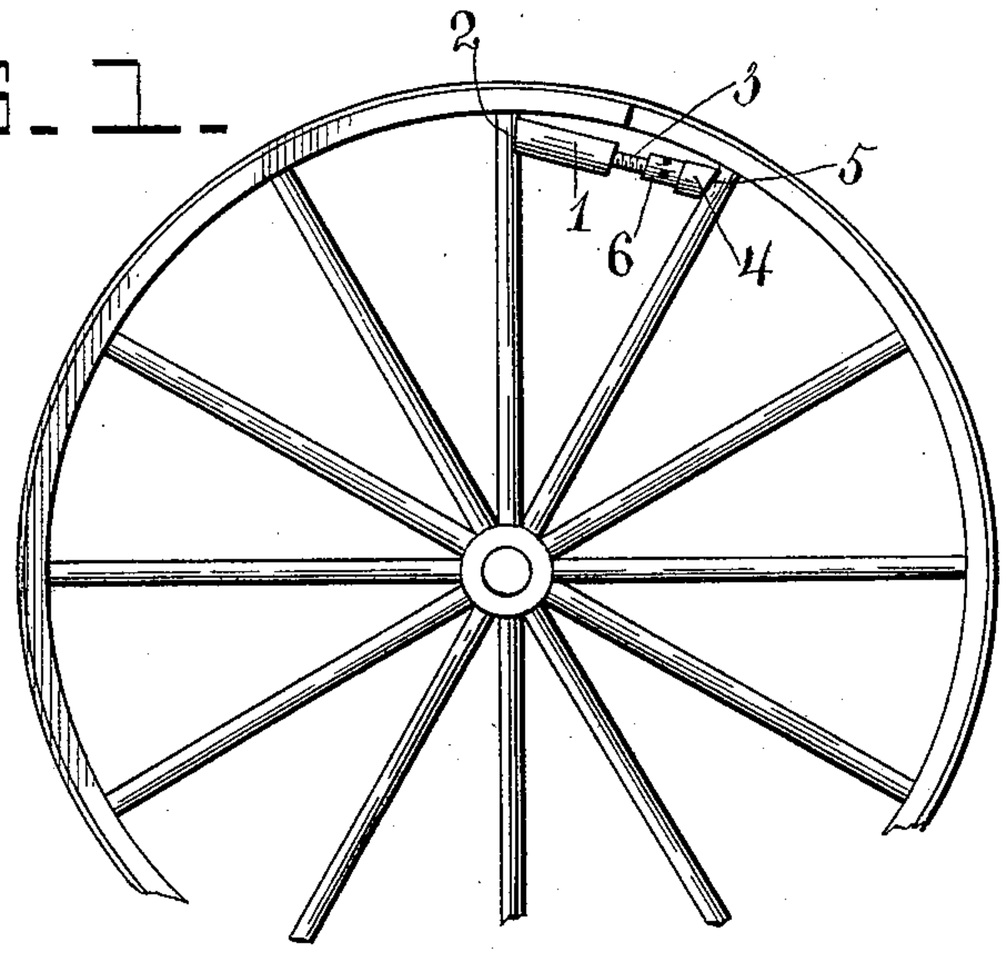


FIG. 2.

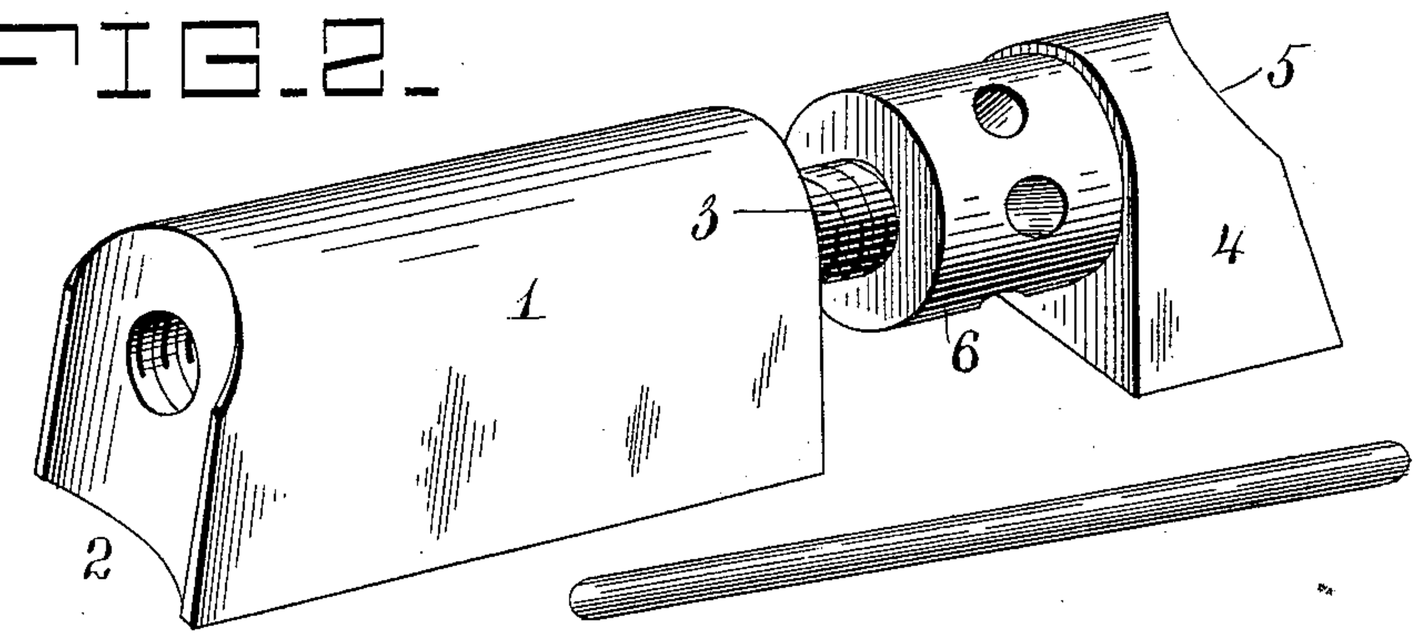
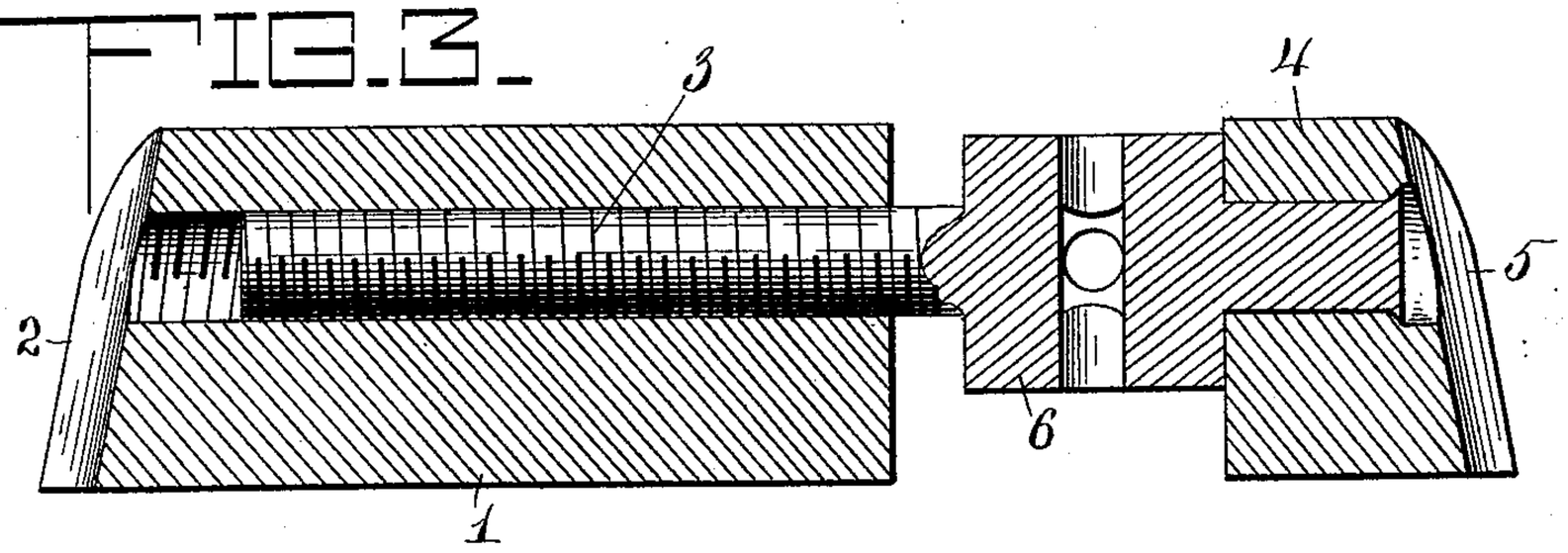


FIG. 3.



Witnesses
W. G. Allen
Victor J. Evans

Inventors.
Tilman F. Leak
and Robert West.
By John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

TILMAN F. LEAK AND ROBERT WEST, OF MONTGOMERY, ALABAMA.

TIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 606,929, dated July 5, 1898.

Application filed June 14, 1897. Serial No. 640,714. (No model.)

To all whom it may concern:

Be it known that we, TILMAN F. LEAK and ROBERT WEST, of Montgomery, in the county of Montgomery and State of Alabama, have invented certain new and useful Improvements in Tire-Tighteners; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in tire-tighteners, the object of the same being to provide a simple and effective device which will separate the felly at the joint and permit of the insertion of a wedge.

The invention contemplates a construction providing blocks which fit the spokes at each side of the joint and are engaged by a screw having a head with transverse openings through which the operating-lever is passed.

With the above ends in view the invention consists in the particular construction and combination of the parts, as described in the following specification and specifically set forth in the appended claim.

In the accompanying drawings, which form a part of this specification, Figure 1 is a view showing the application of our invention. Fig. 2 is a perspective view of the device. Fig. 3 is a sectional view through the same.

Referring to the drawings by numerals, 1 designates a block one end of which is plane, while the opposite end is grooved, presenting a concave surface 2, the groove being inclined with respect to the block. This block is provided with a longitudinal opening through the same, said opening being threaded to engage a screw 3, which is passed into the same. To the opposite end of the screw is loosely connected a block 4, the inner end of which is plane, while its outer end is grooved in a similar manner to the grooved end of the other block, presenting a concave surface 5, which is inclined from one end to the other. Adjoining the block 4 the screw is formed with a head or rigid collar 6, having openings through the same to receive a lever or operating-handle which provides for turning the screw.

The outer ends of the blocks are grooved in the manner shown and hereinbefore described in order to properly engage the spokes with which they are adapted to contact, and by forming the said grooves the bearing of the blocks upon the spokes is had to the full width of said blocks.

The arrangement of the parts forms, practically, a jack-screw, by which a considerable force can be applied in separating the felly of a wheel, and in operation the blocks are placed between the spokes at each side of a joint in the felly, and when the screw is turned the said device will ride up the spokes until their movement is stopped by engaging the felly, after which additional pressure tends to separate the joint of the felly and provide for inserting a wedge. After the felly has been tightened at one joint the device is applied to the opposite joint and the operation repeated.

From the foregoing it will be apparent that the device forms a simple and effective means for tightening vehicle-wheels. As a great amount of power can be obtained from the screw, it is also obvious that the said device could be employed for other purposes, though the particular shape of the outer ends of the block adapt it for the special purpose hereinbefore mentioned.

Having thus described the invention, what is claimed as new is—

In a device for tightening vehicle-wheels, the combination of the block having a threaded opening through the same and grooved transversely at one end, said groove being inclined with respect to the block, a block loosely mounted upon the other end of the screw, the outer end of said block being grooved similar to the corresponding end of the other block, a head or rigid collar formed on the screw adjoining the loosely-mounted block, said head or collar having transverse openings, and a lever or operating-rod adapted to be passed through said openings, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

TILMAN F. LEAK.
ROBERT WEST.

Witnesses:
E. O'BRIEN,
H. T. BARTLETT.