No. 897,991. PATENTED SEPT. 8, 1908.

W. C. McCOY.

SPOKE PULLER.

APPLICATION FILED JUNE 26, 1906.

Fig. 1.

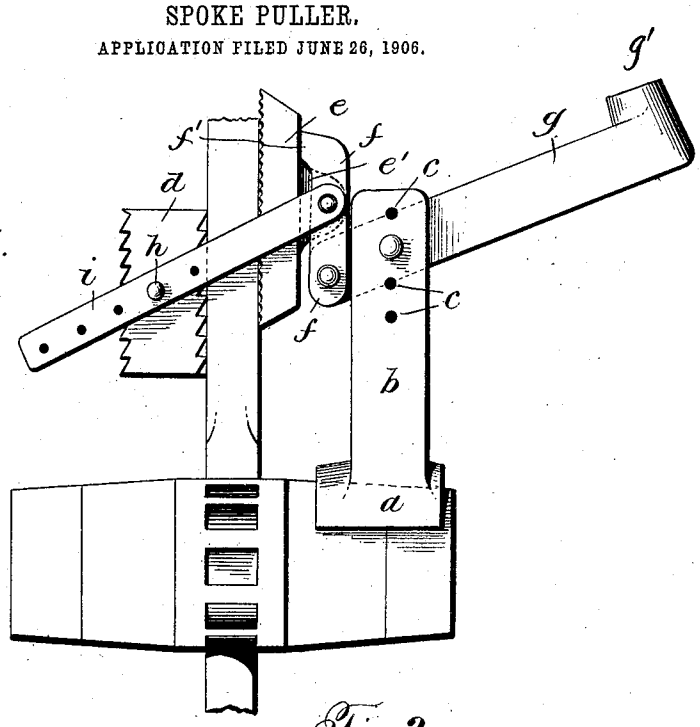


Fig. 2.

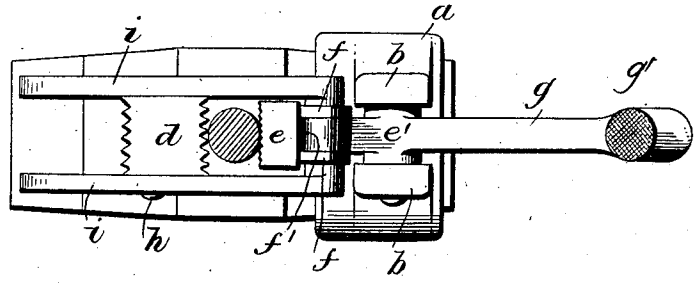
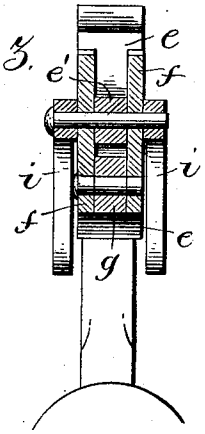


Fig. 3.



Witnesses:

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SPOKE-PULLER.

No. 897,991. Specification of Letters Patent. Patented Sept. 8, 1908.

Application filed June 26, 1906. Serial No. 323,446.

To all whom it may concern:

Be it known that I, WILLIAM C. McCOY, a citizen of the United States, residing in Great Bend, in the State of Kansas, have invented certain new and useful Improvements in Spoke-Pullers, of which the following is a specification.

My invention relates to spoke pullers or devices for removing spokes from hubs of vehicle wheels, more particularly broken spokes or spoke stubs, and its object is to provide a puller which is particularly simple in construction, which may be readily adapted to grip and draw spokes of various sizes and which, generally, operates in a highly efficient manner.

To this end, the invention includes the combination and arrangement of the component parts to be hereinafter described and particularly pointed out in the claims.

The invention is illustrated in the accompanying drawings in which

Figure 1 shows one exemplification of my device in side elevation. Fig. 2 is a plan view of the same and Fig. 3 is a sectional view.

The invention includes, generally, a main support, a pair of gripping blocks and means for moving the blocks while maintaining the same in firm engagement with the spoke, said means being designed to be actuated by the blow of a heavy hammer or sledge.

The main support is designated by *a* in the accompanying drawings and comprises a base having a concave bottom conforming generally to the curvature of a wheel hub and designed to find a rest thereupon, and two standards *b* rising from the base in parallel relation, provided with a plurality of pairs of registering openings *c*.

The clamping members, or blocks, for directly engaging the spoke or spoke stub to be removed, are designated *d*—*e* respectively, the latter being linked to the short end of a lever *g*, which is pivotally mounted between the standards *b*, and the opposite end of which is designed to be struck by a sledge in removing a spoke, said end being preferably provided with an anvil *g'* to receive the blow. In the exemplification of my invention herein illustrated, the block *e* is provided with a rearwardly extending ear *e'* which projects between the links *f* to which it is pivotally connected; the lower ends of said links being pivotally connected to the short end of the lever *g* and the upper end of the links having slightly off-set portions *f'*, designed to bear upon the rear face of the block *e*.

The block *d* is adjustably mounted between arms *i*, pivotally secured to their ends to extension of the pivot pin which serves to connect the links *f* to the ear *e'*, and is provided with opposite serrated or otherwise roughened gripping faces. One adjustment of the block is obtained by providing a series of registering openings in the arms *i* in any pair of which a pivot pin *h* may be held upon which the block *d* is directly mounted. Provision is made in the present invention for adjusting the gripping surface of the block *d* in reference to the gripping surface of the block *e* by merely reversing the block upon the pin *h* and to this end the opening through the block which receives this pin *h* is arranged in closer proximity to one gripping face than the other or eccentrically of the block.

In using the described puller to draw a spoke or spoke stub from a wheel hub the main support is rested upon one end of the hub to one side of the spoke to be drawn and the blocks *d*—*e* brought into firm engagement with the spoke; the outer end of lever *g* preferably extending upwardly from its pivotal point, or lying in a horizontal plane intersecting said pivotal point, or plane above such horizontal plane, as shown in the accompanying drawings. The anvil *g'* of the lever is then struck a sharp blow which throws the inward end thereof upwardly and through the links *f*, forces the block *e* upwardly and through the arms *i*, the block *d* is carried in the same direction and is also drawn into firmer contact with the spoke. By this means, the spoke is dislodged from its socket.

I claim:

In a spoke puller a standard, a power lever fulcrumed intermediate its ends thereto, a pair of gripping blocks, a pair of links *f* interposed between one of the blocks and the standard, said links being pivoted at the lower ends to one end of said power lever, a pair of links pivotally connected at their op-

posite ends to each of said blocks respectively, a pin pivotally connecting the two pairs of links to each other and to the adjacent block, and projecting portions on the links *f* extending beyond the said pivot pin and co-acting with the last named block.

In testimony whereof, I have hereunto signed my name in the presence of two attesting witnesses at Great Bend, Kansas, this 13th day, of June, 1906.

WILLIAM C. McCOY.

Witnesses:
F. G. STROTHMAN,
L. P. KERN.