

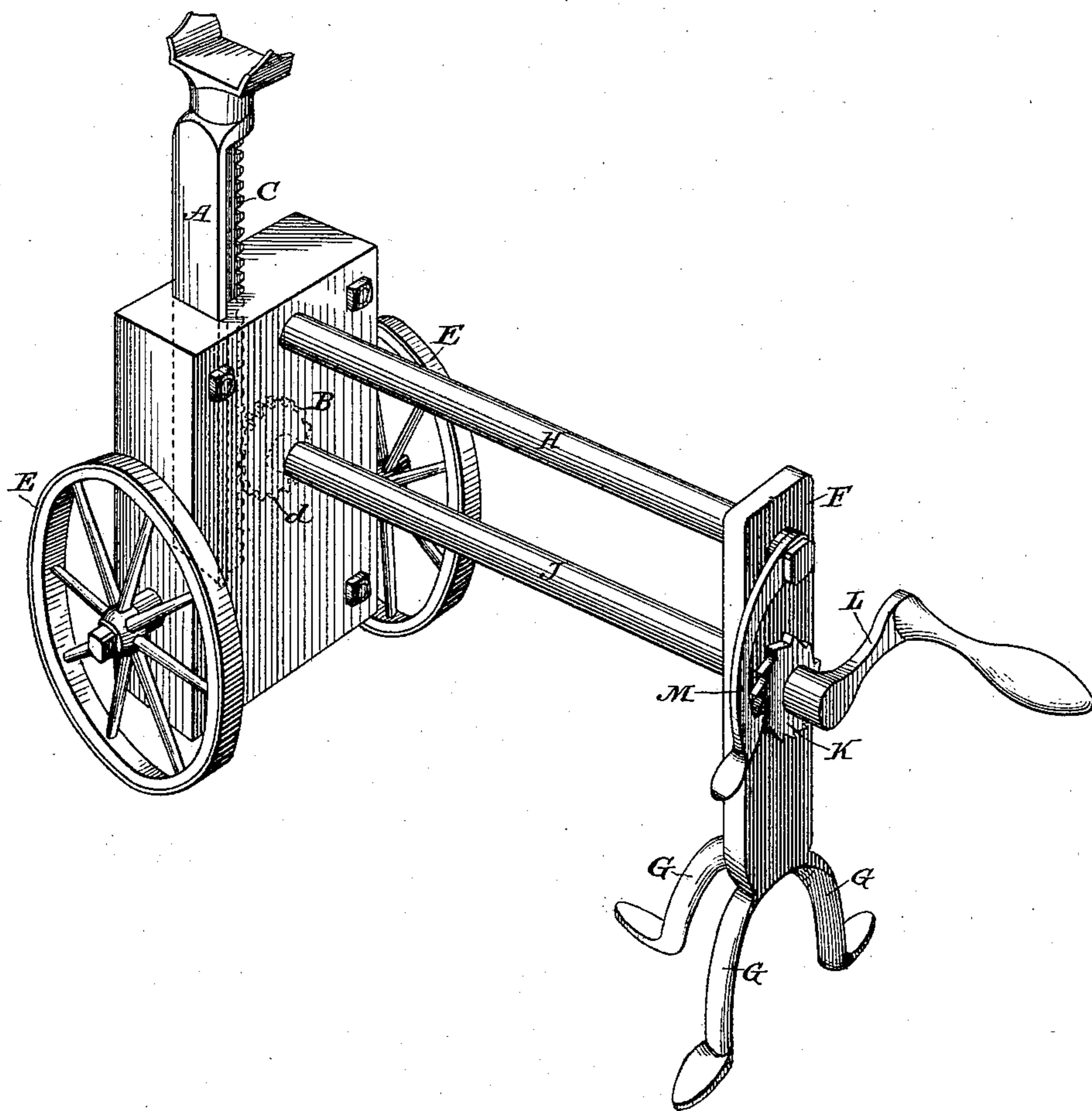
(No Model.)

J. A. ZAHN.

WAGON JACK.

No. 349,194.

Patented Sept. 14, 1886.



Attest.

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UNITED STATES PATENT OFFICE.

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WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 349,194, dated September 14, 1886.

Application filed June 5, 1886. Serial No. 204,219. (No model.)

To all whom it may concern:

Be it known that I, J. ADAM ZAHN, a resident of the city, county, and State of New York, have invented a new and useful Improvement in Wagon-Jacks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

My improved wagon-jack is represented in perspective.

My invention relates to an improvement in jacks for lifting wagons, carriages, trucks, &c., as required to remove the wheels for oiling or repairs.

The object of my invention is to facilitate the application of the jack to the axle or other point of the vehicle by one person otherwise unaided, without the need of stooping or otherwise assuming an unpleasant position in the endeavor to properly locate the machine.

It consists in mounting on wheels a jack of any approved construction operated by a rotating gear, and combining with its casing and gear an outer standard connected by a coupling pole or bar to the casing, and which furnishes an outer bearing for an actuating shaft and crank, by which the gear may be operated with ease and comfort at a distance from the lifting or jack bar.

In the accompanying drawing, A represents a lifting-bar having a rack, *c*, upon one side thereof, and which is mounted in a suitable case, B, and operated in the customary manner by a pinion, *d*, (see dotted lines,) journaled in the case to engage the teeth of the rack.

The case B is mounted on wheels E E, by which it may be very easily moved about and placed under the axle or body of the wagon or carriage to be lifted, this movement of the jack and its case being facilitated by means of a standard, F, preferably mounted upon three legs, G G G, and which is attached to the case by a connecting-bar, H, made fast both to the case and standard in any suitable manner.

A rotating shaft, J, is journaled in suitable bearings provided for it in the case B at one end, and in the standard F at the other, as shown in the drawing. The pinion *d*, engaging the rack *c*, is secured to the inner end of this shaft J, and its outer end is fitted with a

ratchet-wheel, K, and a crank, L. A pawl, M, is pivoted upon the outer face of the standard to engage the teeth of the ratchet-wheel K, and thereby prevent a reverse movement of the shaft J when it is employed in lifting or supporting a load placed upon the jack-bar A.

In the use of the device thus simply constructed the jack is wheeled under the axle or body of the vehicle to be lifted, the standard F being made use of as a handle for steering and guiding the jack to the proper spot. The long reach of the bar H and shaft J permits the jack to be run under any portion of the body of the vehicle with great ease and without any necessity for the operator to stoop and crawl under the vehicle. When properly located, the jack-bar A is worked up so as to lift the vehicle and load, as required, by turning the crank L, and with it the crank-shaft J and pinion *d*, a reverse movement of the pinion and shaft under the influence of the load being automatically prevented by the engagement of the pawl M with the ratchet-wheel K. When it is desired to lower the vehicle and release the jack, the pawl M is disengaged from the ratchet-wheel and the shaft allowed to rotate in the opposite direction.

By means of this device one person may readily handle any vehicle, from the heaviest truck to the nicest carriage, without any assistance and with great rapidity and ease.

For winter use runners may be substituted as an equivalent for the wheels.

It is evident that a worm-wheel on the shaft J engaging beveled teeth on the lifting-bar may be substituted as an equivalent for the rack and pinion herein described.

I claim as my invention—

The combination, with the lifting-bar of a wagon-jack, of the wheels E E, outer standard, F, connecting-bar H, crank-shaft J, and pinion *d*, secured to said shaft and engaging a rack on the lifting-bar, all substantially in the manner and for the purpose herein set forth.

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

J. ADAM ZAHN.

Witnesses:

CHARLES F. WEIMERS,
S. A. STARERS.