(No Model.) 2 Sheets—Sheet 1.

P. HOCKETT.

MECHANICAL MOTOR.

No. 388,416. Patented Aug. 28, 1888.

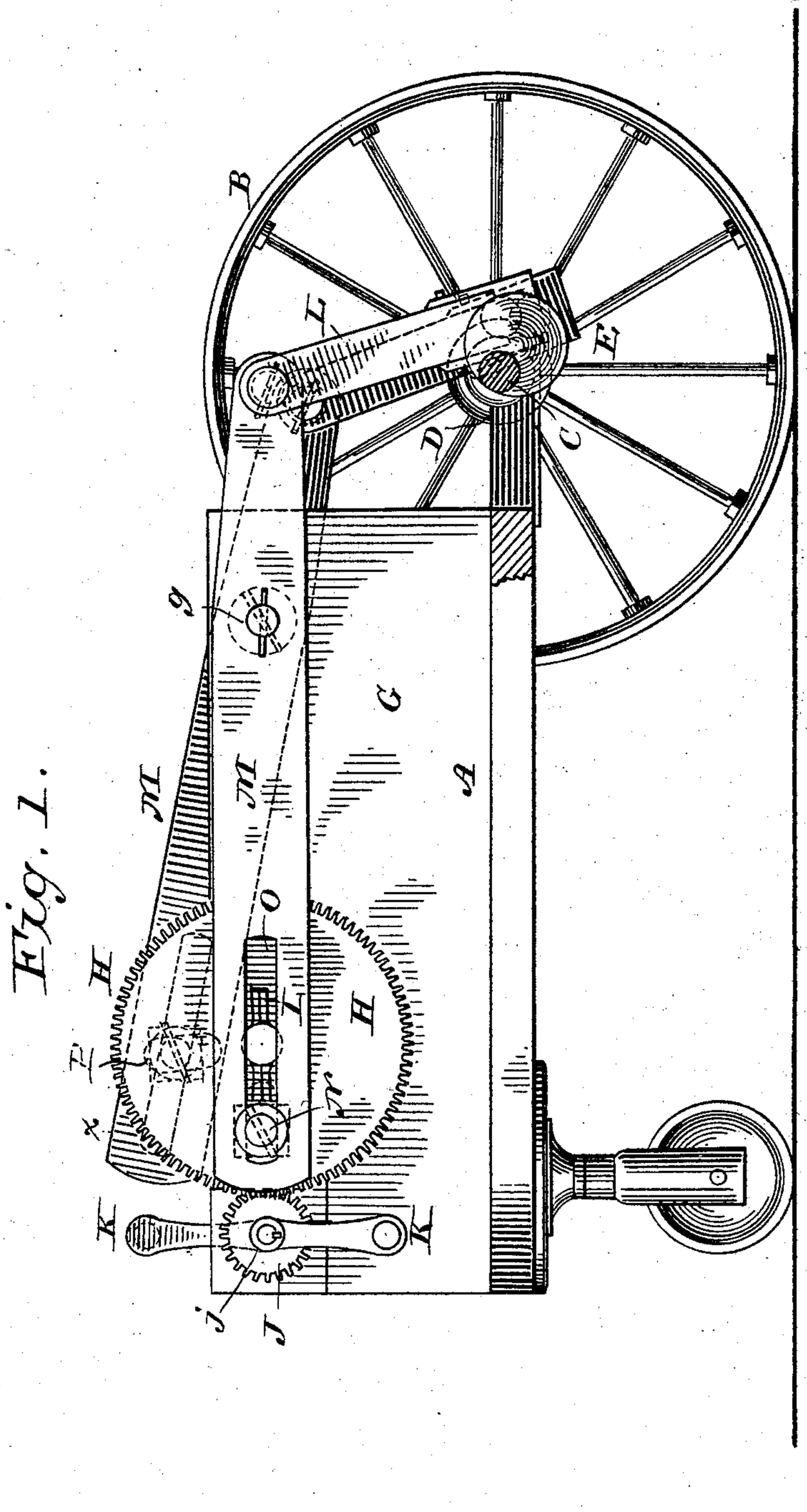

Fig. 1.

WITNESSES,

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INVENTOR.

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By his Attorneys

Marcus S. Hopkins.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

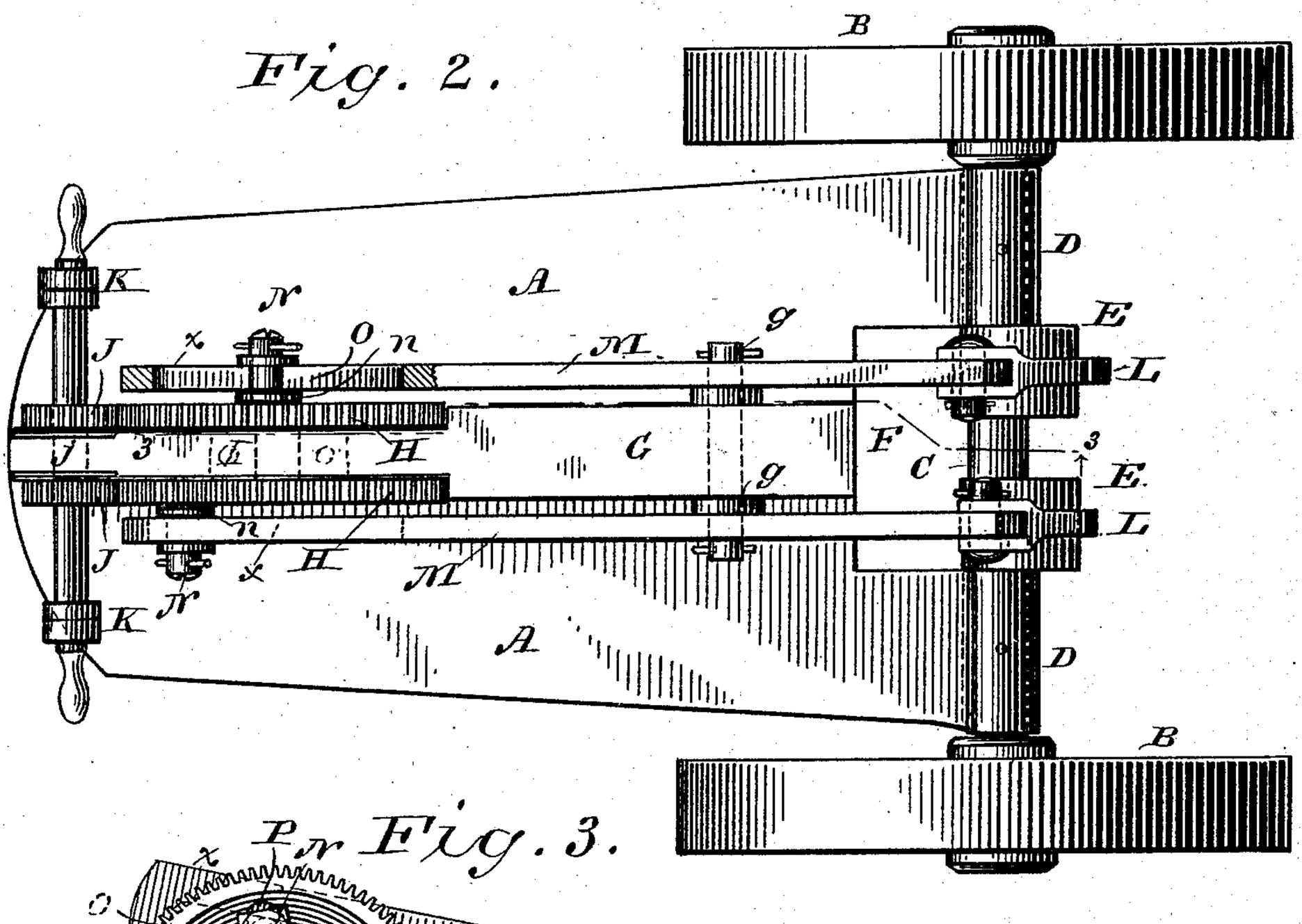
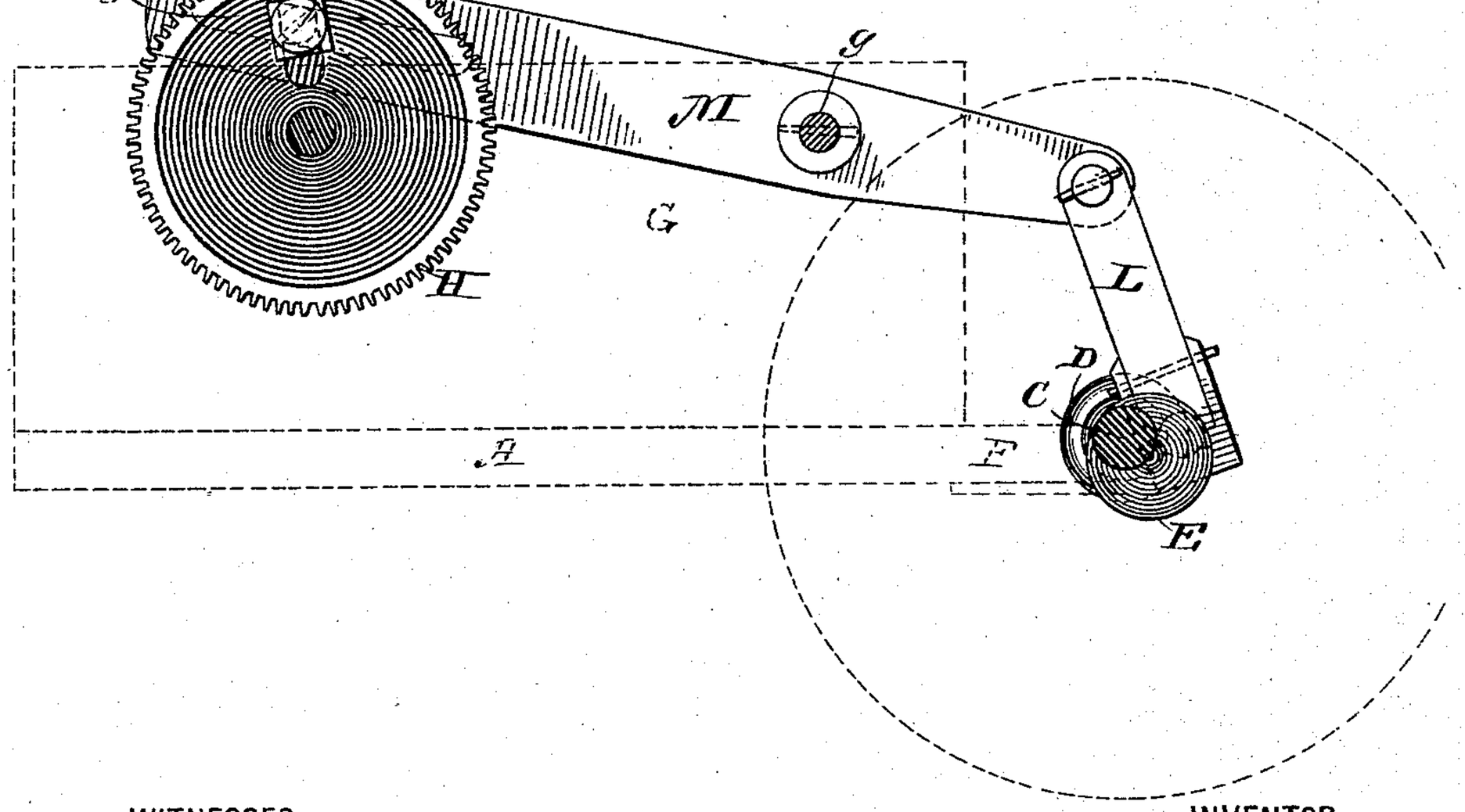


Fig. 3.



WITNESSES

H. C. Newman.
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INVENTOR.

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UNITED STATES PATENT OFFICE.

PLEASANT HOCKETT, OF STAFFORD COUNTY, KANSAS.

MECHANICAL MOTOR.

SPECIFICATION forming part of Letters Patent No. 388,416, dated August 28, 1888.

Application filed May 29, 1888. Serial No. 275,437. (No model.)

To all whom it may concern:

Be it known that I, PLEASANT HOCKETT, a citizen of the United States, residing in Stafford county, Kansas, have invented new and useful Improvements in Mechanical Motors, of which the following is a specification.

The primary object of my invention is to provide improved apparatus for propelling vehicles; but my object is also to provide an apparatus for various kinds of machinery for transmitting and multiplying power.

In the accompanying drawings, illustrating my invention, Figure 1 is a side view, Fig. 2 a top plan view, and Fig. 3 a section on the line 3 3 of Fig. 2.

While I have illustrated in the drawings my invention as applied to a vehicle, I wish it understood that some features of the invention may be applied to various kinds of apparatus. I will, however, limit the description of the invention to a vehicle, as shown in the accompanying drawings.

Referring now to the drawings, A indicates the vehicle-body; B, the main carrying-wheels, rigidly secured to an axle, C, journaled in suitable bearings, D, at the rear end of the vehicle-body.

E E indicate cranks or eccentrics on the axle, on opposite sides thereof, and preferably arranged midway between the wheels. The vehicle-body is cut away at F to permit the proper movement of the cranks E.

G indicates a standard, preferably extending along the longitudinal central line of the vehicle-body from front to rear.

H H indicate the driving-wheels, which are shown as cog-wheels arranged on opposite sides of the standard G at its front end and journaled in suitable bearings, I.

J indicates a small cog-wheel or pinion journaled in the standard at *j* and arranged to gear with one of the cog-wheels H. The cog-wheels H are rigidly secured together, as shown. Two pinions may be used, if desired, one for each of the driving-wheels H.

K is a crank secured to the pinion J, by which it may be turned. As the pinion is revolved the motion will be imparted to the cog-wheels H. Instead of applying the power by a crank, it may be applied by a belt or in other suitable ways.

L L indicate pitman-rods secured to the eccentrics E. At their upper ends the pitman-rods are hinged to the shorter arms of the driving-levers M, which are pivoted to the standard G at *g*. The ends *x* of the lever-arms are attached to the driving-wheels H by means of wrist-pins N, which project through slots O in the levers M and are free to slide therein when the driving-wheels H are revolved. The wrist-pins N are preferably made adjustable in radial slots P, formed in the driving-wheels H. The wrist-pins are provided with flanges or collars *n* between the driving-levers M and the driving-wheels H, and with adjustable nuts for securing them to the driving-wheels H. By this organization of apparatus power applied to the pinion J will be multiplied by the larger driving-wheels H, and the power transmitted by the driving-wheels H to the longer arms of the driving-levers M will be multiplied by the levers M when transmitted to the pitman-rods L, so that comparatively small power applied to the crank or pinion J may be sufficient to overcome heavy loads.

R indicates the caster-wheel for supporting the front end of the vehicle-body. I have merely shown such a wheel as one way of supporting the front end of the vehicle. It will of course in most cases be desirable to use an axle with a pair of wheels at the front end of the vehicle as well as at the rear end.

My improvements are especially applicable to hand-cars; but they may be applied to all kinds of vehicles, and also to various kinds of apparatus in which it is desirable to transmit and multiply power.

I claim as my invention—

1. The combination of the driving-wheels, the driving-levers, the pitman-rods hinged to the shorter ends of the driving-levers, and the wrist-pins secured to the driving-wheels and adapted to slide in slots in the ends of the longer arms of the driving-levers, substantially as set forth.

2. The combination of the vehicle-body, the wheels, the axle rigidly secured to the wheels,

the cranks on the axle, the standard on the vehicle-body, the driving-wheels mounted thereon, the driving-levers, the pitman-connections between the driving-levers and the cranks on the axle, and the wrist-pins extending through slots in the longer arms of the driving-levers for connecting the levers to the driving-wheels, substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

PLEASANT HOCKETT.

Witnesses:
WILLIAM B. COE,
FRANCIS M. GOIN.