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J. H. GABERT.

Hand-Car.

No. 163,176. Patented May 11, 1875.

Fig 1

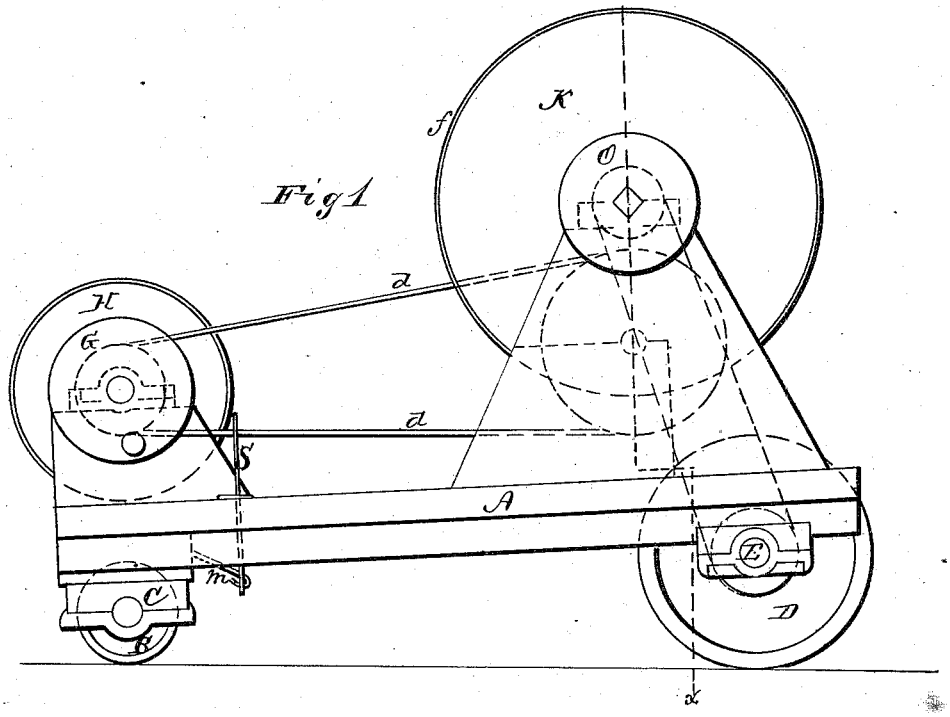
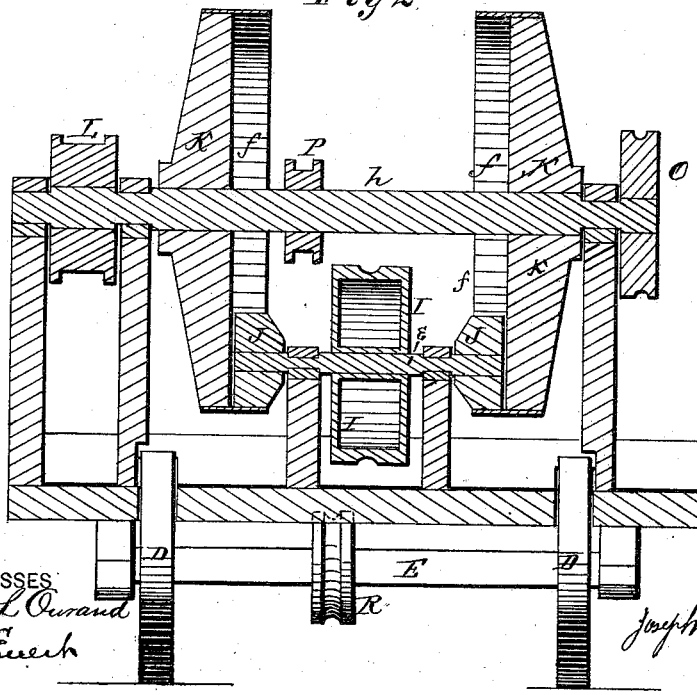


Fig 2



WITNESSES

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2 Sheets--Sheet 2.

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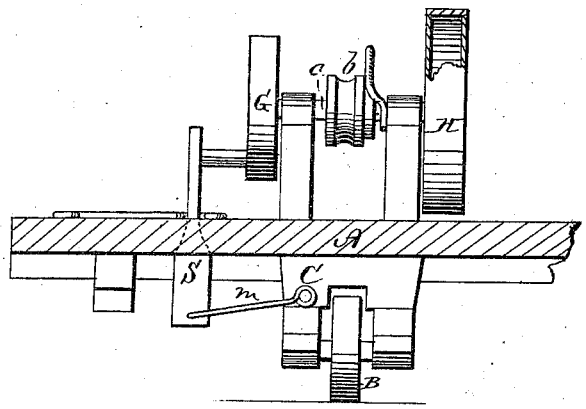
Fig 3



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH H. GABERT, OF ATHENS, OHIO.

IMPROVEMENT IN HAND-CARS.

Specification forming part of Letters Patent No. **163,176**, dated May 11, 1875; application filed March 30, 1875.

To all whom it may concern:

Be it known that I, JOSEPH H. GABERT, of Athens, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Portable Hand-Powers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a hand-power for running machinery, street-cars, derricks, &c., and also for farming and railroading purposes, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a side elevation of my portable hand-power. Fig. 2 is a section through the line *x x* of the same. Fig. 3 is an end view of the power.

A represents a platform or frame of any suitable dimensions, supported at the front end on a single wheel, B, pivoted in a truck, C, and at the rear end on two wheels, D D, secured to an axle, E, revolving in suitable bearings attached to the under side of the frame or platform A. On the front end of the platform A are suitable bearings for a shaft, *a*, on one end of which is secured a crank-wheel, G, and on the other end a fly-wheel, H. On the center of the shaft *a* is secured a pulley, *b*, connected by a belt or chain, *d*, with an equalizing-wheel, I, secured on a shaft, *e*, revolving in suitable bearings on the rear end of the platform A. The wheel I is formed with a circumferential groove, in which the belt or chain *d* is placed. On each end of the shaft *e* is secured a friction-pulley, J, which works against the inner surface of a rim, *f*, projecting from the circumference of a large wheel, K. The two wheels K K are secured on a shaft, *h*, revolving in suitable bearings above and parallel with the shaft *e*. The fly-wheel H and equalizing-wheel I are both made hollow, and provided in their circumference with suitable doors, through which said wheels may be filled with sand, dirt, gravel, or any material at hand where the machine is to be used.

The design of my hand-power is to have these wheels empty while going from place to place, and when in position for work the wheels H and I are to be filled with such suitable material as is most convenient at hand, to render said wheels heavy and powerful. On the shaft *h* is secured a drum, L, to be provided with rope for hoisting, when the machine is to be used for such purposes. It is also provided with a pulley, O, to be connected by a belt with light machinery, when such is intended to be run. In this case the wheels H I should be emptied, which is also the case when removing the machine from place to place, this being done by simply connecting a pulley, P, on the shaft *h* by a belt with a pulley, R, on the axle E.

The machine may be moved on any road where an ordinary wagon will go, it being guided by means of a lever, S, connected by a rod, *m*, with the front wheel-truck C, which is pivoted to the frame or platform.

This power may also be used for street-railroads, in which case it should run on four wheels instead of three.

The machine may be used for many different purposes, and by changing the size of the drive-wheels and pulleys the speed may be increased without decreasing the power. Very little power applied to the crank-wheel G will exert a tremendous force on the drum, so that very heavy weights may be raised.

It may be reversed suddenly with perfect safety, without in any way damaging the working parts.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the driving-shaft *a*, hollow fly-wheel H, and pulley *b*, belt *d*, shaft *e*, hollow equalizing-wheel I, friction-pulleys J J, wheels K K, having projecting rims *f f*, and a truck, substantially as and for the purposes set forth.

JOSEPH HARRISON GABERT.

Witnesses:

C. L. EVERT,

C. M. BART.