

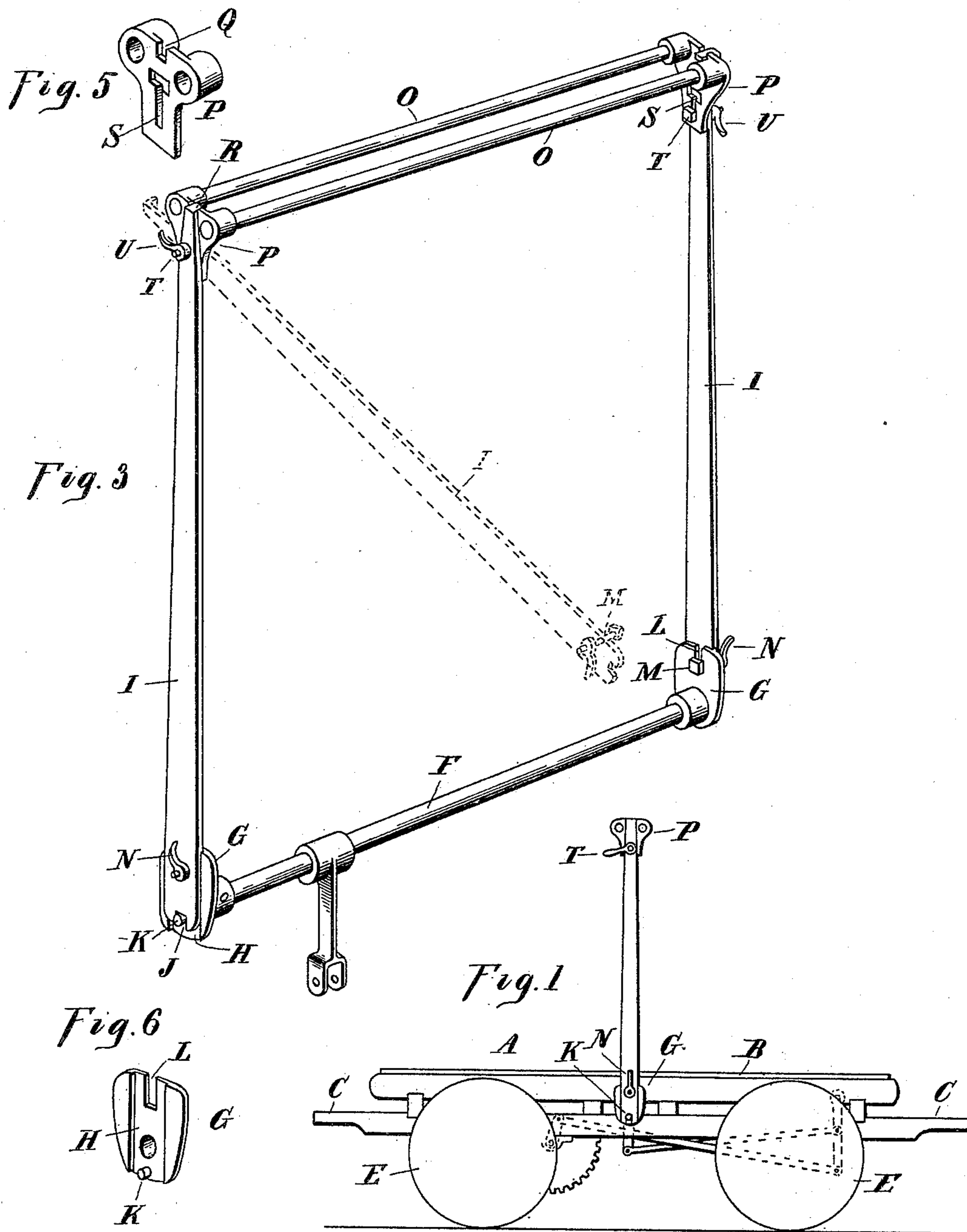
(No Model.)

2 Sheets—Sheet 1.

C. ROBERTS.
HAND CAR.

No. 446,713.

Patented Feb. 17, 1891.



Witnesses:

P. M. Halbert
L. J. Whittemore

Inventor:

Cyrus Roberts
By Messrs. Magnien & Co.
Atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2

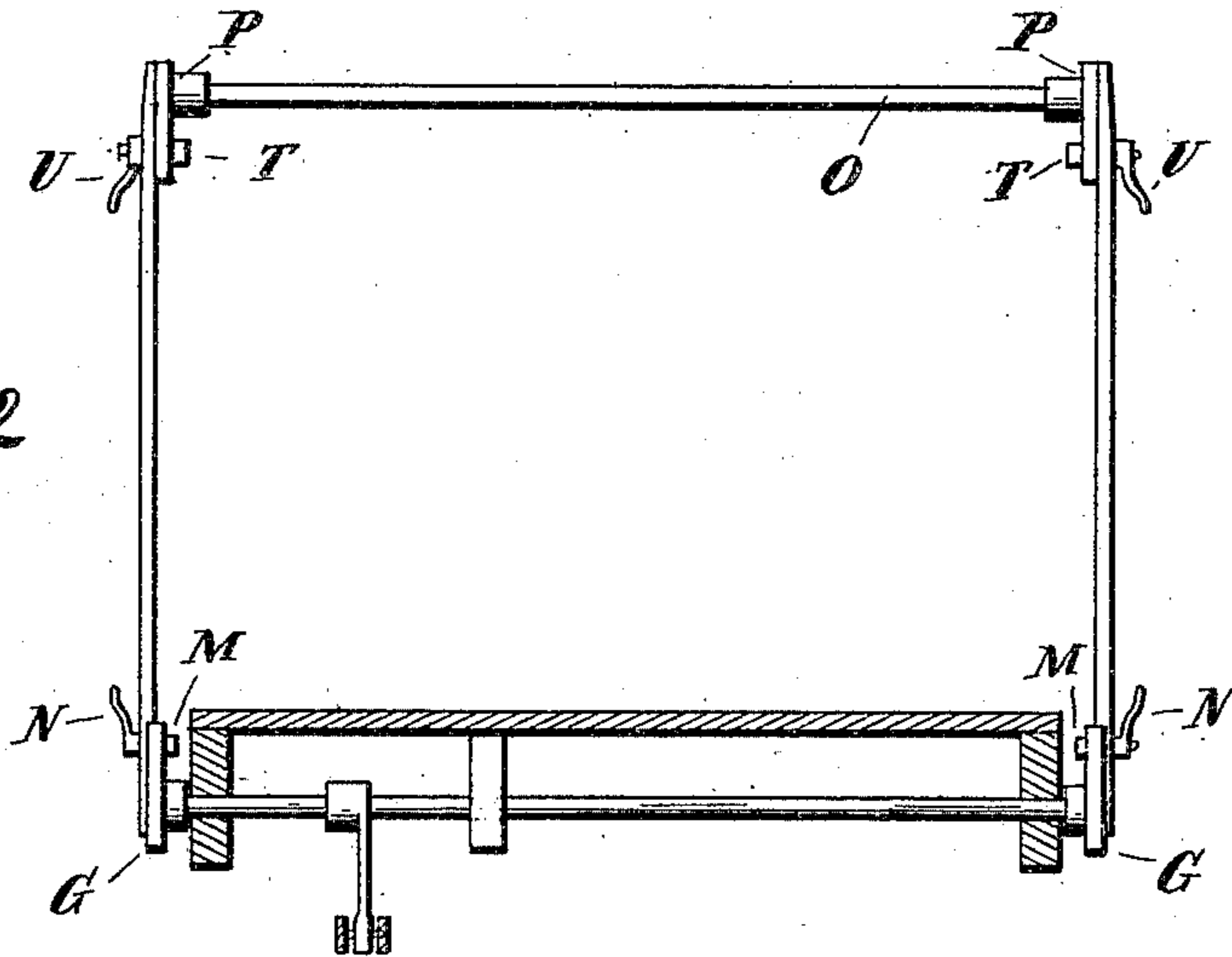
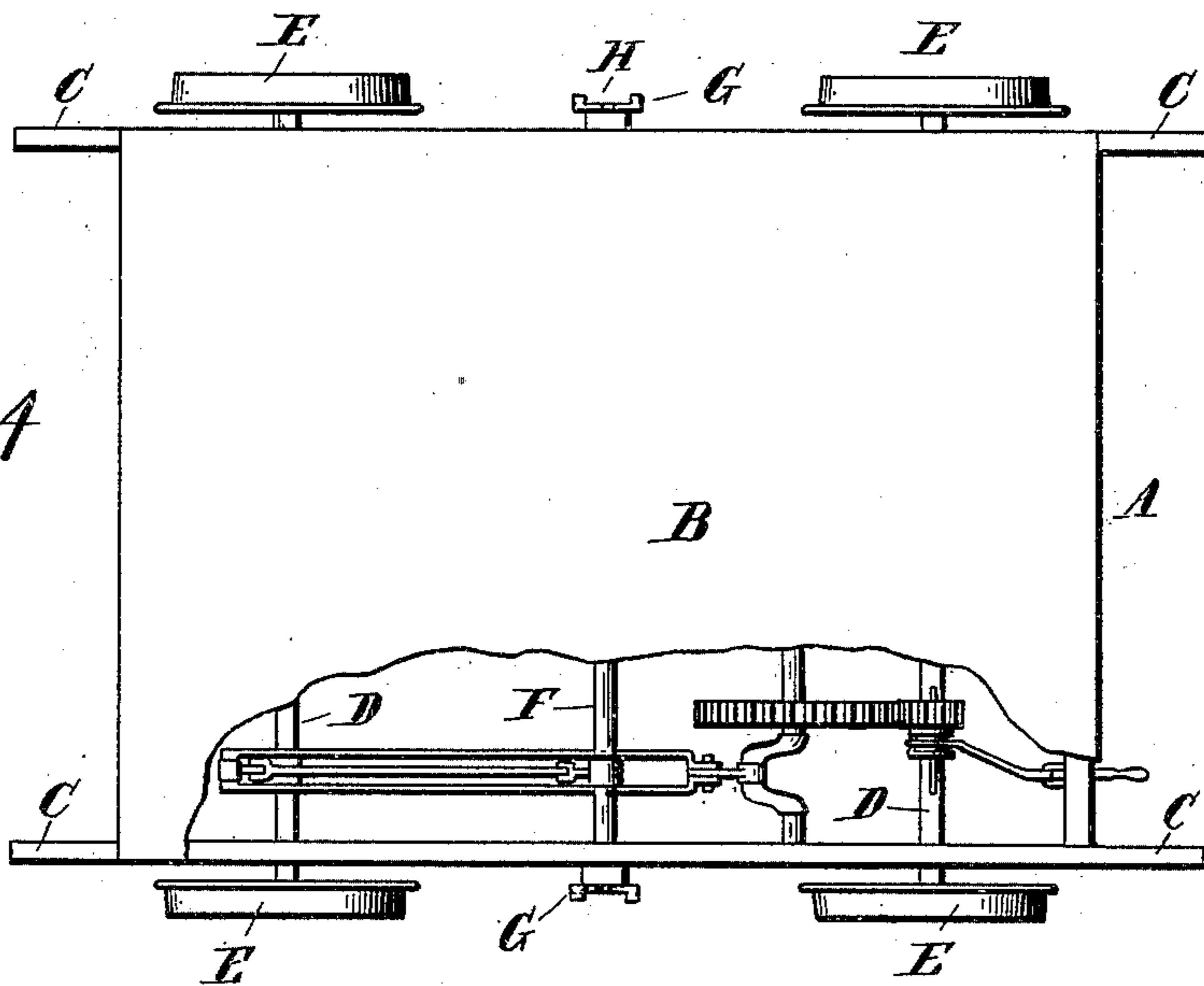


Fig. 4



Witnesses:

R. M. Hulbert
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Inventor:

Cyrus Roberts
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UNITED STATES PATENT OFFICE.

CYRUS ROBERTS, OF THREE RIVERS, MICHIGAN.

HAND-CAR.

SPECIFICATION forming part of Letters Patent No. 446,713, dated February 17, 1891.

Application filed July 14, 1890. Serial No. 358,752. (No model.)

To all whom it may concern:

Be it known that I, CYRUS ROBERTS, a citizen of the United States, residing at Three Rivers, in the county of St. Joseph and State of Michigan, have invented certain new and useful Improvements in Hand-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in hand-cars; and the invention is designed to form an improvement on a patent granted to me June 10, 1890, No. 429,962. In this patent the propelling-gear of the hand-car is provided with a propelling lever or bail detachably secured with its ends to the ends of the oscillating drive-shaft to permit the removal of the propelling-levers when it is desired to load or unload the car.

The object of my present invention is to so construct the side levers that they may be moved out of the way independent of each other to permit unloading and loading from either side of the car and without the necessity of removing the whole bail.

To this end my invention consists in the peculiar construction, arrangement, and operation of different parts, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved hand-car. Fig. 2 is a vertical central cross-section with the propelling-levers in elevation. Fig. 3 is a detached perspective view of the propelling-levers and the oscillating drive-shaft. Fig. 4 is a plan view of the hand-car with its platform partly broken away to show the drive gear. Figs. 5 and 6 are detached perspective views of some of the parts, as indicated by letters of reference.

A is the car; B is the platform thereof; C are the handles for lifting the car off the track; D are the front and rear axles; E are the front and rear wheels, all of known construction.

My invention applies to the propelling mechanism, which consists of the oscillating drive-shaft F, journaled below the platform and extending transversely across the same to the sides of the car. To the ends of these oscillating drive-shafts, outside of the car-body, are secured the crank-arms G, provided with vertical recesses H upon their outer faces,

into which the lower ends of the side levers I are adapted to engage and to be detachably secured thereto in the following manner: In the lower end of each side lever is cut a notch J, adapted to engage with the stud K, projecting from the recessed face of the crank. The upper end of the crank is provided with a slot L, adapted to engage with a bolt M, which passes loosely through the side lever and receives from the outside a handled nut N, all so arranged that the side levers may be secured by this means to the cranks G, as shown in the drawings, and may be rigidly detached therefrom by unscrewing the nut N and vertically raising the side lever.

The upper ends of the two side levers are pivotally connected to one or two handle-bars O in the following manner: A metal plate P, which is provided with means for securing thereto one end of the handle bar or bars, is provided at its upper edge with a recess or notch Q, into which a hook or stud R on the upper end of the side lever I is adapted to engage, and a T-slot S, formed in the body of the plate, is adapted to engage with the bolt T, which passes loosely through the upper ends of the side levers and has a handled nut U, all so arranged that by these means the upper ends of the side levers may be firmly secured to the ends of the handle-bar, as shown in the drawings. It will now be seen that in order to turn either end of the two side levers out of the way the nuts N and U have to be loosened first. Then the side lever is vertically raised until it is free to be turned upon the bolt T high enough to be out of the way for loading and unloading, and by tightening the nut U it may be held in this position while loading or unloading.

As material is generally loaded or unloaded on one side of the car only, my construction has the advantage of leaving one of the side levers intact in position, so that it may be propelled a short distance, as in distributing material along the track; and, further, my construction has the advantage that the propelling-levers are always carried along with the car without burdening the workmen to take care of them, and either of the side levers may be turned in or out of position without the workmen being obliged to dismount from the car.

Should it be desired to disconnect the handle-bar entirely, it will be seen that this may be readily accomplished by disengaging the bolts T with the heads through the enlarged upper ends of the slots S.

What I claim as my invention is—

1. In a railway hand-car, a propelling mechanism having an oscillating drive-shaft journaled transversely the car and extending to the sides thereof, two side levers engaging the ends of said drive-shaft for actuating the same, a handle secured to the upper ends of said side bars, and means for disconnecting said side levers from the drive-shaft and handle, whereby each lever may be independently detached from the drive-shaft and supported on the end of the handle-bar, substantially as described.

2. In a railway hand-car, a propelling mechanism having an oscillating drive-shaft journaled transversely the car and extending to the sides thereof, two propelling side levers detachably engaging the ends of said drive-shaft, one or more handle-bars connecting the upper ends of the side levers, two brackets in which the outer ends of said handle bar or bars are secured, and the clamping-bolts se-

curing the side levers to said brackets and forming a pivotal connection on which the side levers may be folded out of the way, substantially as described.

3. In a railway hand-car, a propelling mechanism having an oscillating drive-shaft journaled transversely the car and extending to the sides thereof, the brackets secured to the ends of the drive-shaft, the propelling side levers engaging said brackets and provided with clamping-bolts detachably securing said side levers to the brackets, the handle-bars connecting the upper ends of the side levers, the brackets in which the ends of the handle-bars are secured, and the clamping-bolts and means for detachably securing the upper ends of the side levers to said brackets, said clamping-bolts forming a pivotal connection for folding the side levers out of the way independently of each other, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CYRUS ROBERTS.

Witnesses:

M. B. O'DOHERTY,
P. M. HULBERT.