

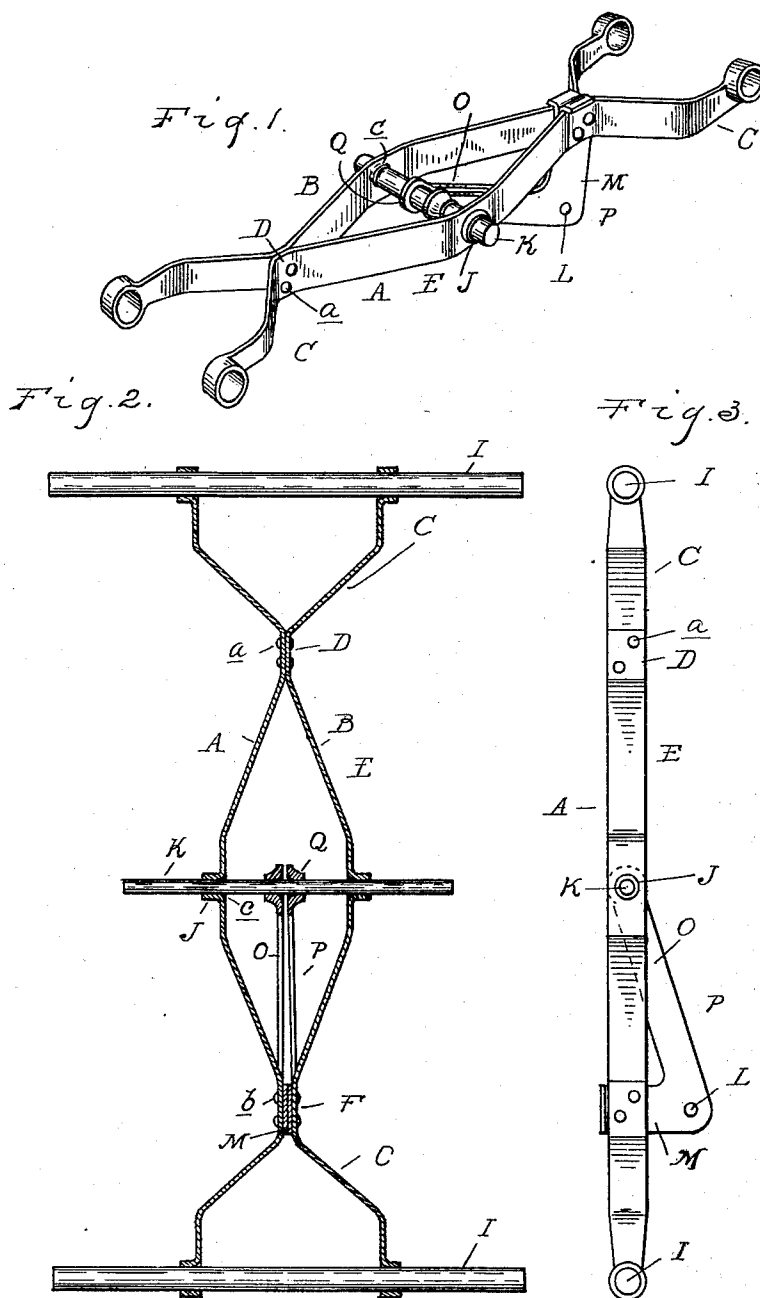
No. 716,524.

Patented Dec. 23, 1902.

J. DONOVAN.  
HAND CAR.

(Application filed Feb. 25, 1902.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES DONOVAN, OF THREE RIVERS, MICHIGAN, ASSIGNOR TO ROBERTS CAR & WHEEL COMPANY, OF THREE RIVERS, MICHIGAN, A CORPORATION OF MICHIGAN.

## HAND-CAR.

SPECIFICATION forming part of Letters Patent No. 716,524, dated December 23, 1902.

Application filed February 25, 1902. Serial No. 95,542. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES DONOVAN, 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.

The invention relates to a walking-beam, and particularly to the pitman-pivot carried thereby; and the invention consists, essentially, in the novel means employed for securing the pivot to the beam, whereby it will be effectively braced to resist the strains to which it is subjected in use.

The invention further consists in the peculiar construction, arrangement, and combination of the various parts of the beam, as will be hereinafter described.

In the drawings, Figure 1 is a perspective view of my improved walking-beam, illustrating the means for securing the pivot thereto. Fig. 2 is a sectional plan view of the beam, and Fig. 3 is a side elevation thereof.

In the drawings thus briefly described, A and B designate two complementary metallic members, each bent to form inclined portions C, securing portions D and F, and a central section E. The members described are combined in the manner indicated in Figs. 1 and 2, the portions C forming the handle-sections for the beam and the sections E the body. The members are connected by rivets a and b, which extend through these securing portions D and F, respectively.

The handle-sections C are apertured at their free ends to receive the handles I. The beam-body is also provided with apertures c, which extend laterally through the body sides midway of the ends, as shown. Thimbles J are provided for the body, which are formed from the material about the apertures, the material being struck out by suitable mechanism to form alining bearings for the fulcrum-shaft K.

L designates the pitman-pivot, which, as shown, is supported beneath the beam in proximity to one of the body ends and is braced, as hereinafter set forth, to resist the strains to which it is subjected. I have shown the pivot as carried by a support M, secured at its upper end between the portions F by means of the rivets b. This support in turn is braced by an inclined section extending from the lower end of the support to the beam.

More particularly, the construction of the connecting mechanism is as follows: The support and brace are formed, preferably, of two angle-shaped members P, the upper ends of the vertical portions of the members being connected to the beam in the manner described and bent so as to be spaced apart at the lower ends to carry the pivot. The inclined portions O of the members are connected at their upper ends to the fulcrum-shaft K, and the ends of these members are preferably provided with thimbles Q, formed in the same manner as the thimbles J, before described. The pitman which engages the pivot being of ordinary construction and forming no part of the present invention is not shown or described.

From the construction of the walking-beam it will be obvious that by supporting and bracing the pitman-pivot in the manner set forth it will be readily enabled to withstand the strains to which it is necessarily subjected, and thus a rigid and durable beam structure is produced. It will also be noticed that the means employed for securing the pivot to the beam are of simple and durable construction, which permits the walking-beam to be manufactured at a minimum cost.

What I claim as my invention is—

1. A walking-beam comprising a body, handle-sections therefor, a support depending from the beam in proximity to one of the body ends, the pivot carried by said support, and an inclined brace extending from the lower end of the support to the beam.

2. A walking-beam comprising a body, han-

dle-sections therefor, the pitman-pivot supported beneath the beam near one end of the body, and a brace for the pivot-support.

3. In a walking-beam, the combination with  
5 the body, of the handle-sections, the fulcrum-shaft, the pivot-support depending from the body at one end thereof, the pivot carried by said support, and an inclined brace connect-

ing the lower portion of said support with the fulcrum-shaft. 10

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

JAMES DONOVAN.

Witnesses:

J. P. McKEY,  
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