

(No Model.)

E. W. LOOMIS.  
WAGON OR OTHER VEHICLE.

No. 585,768.

Patented July 6, 1897.

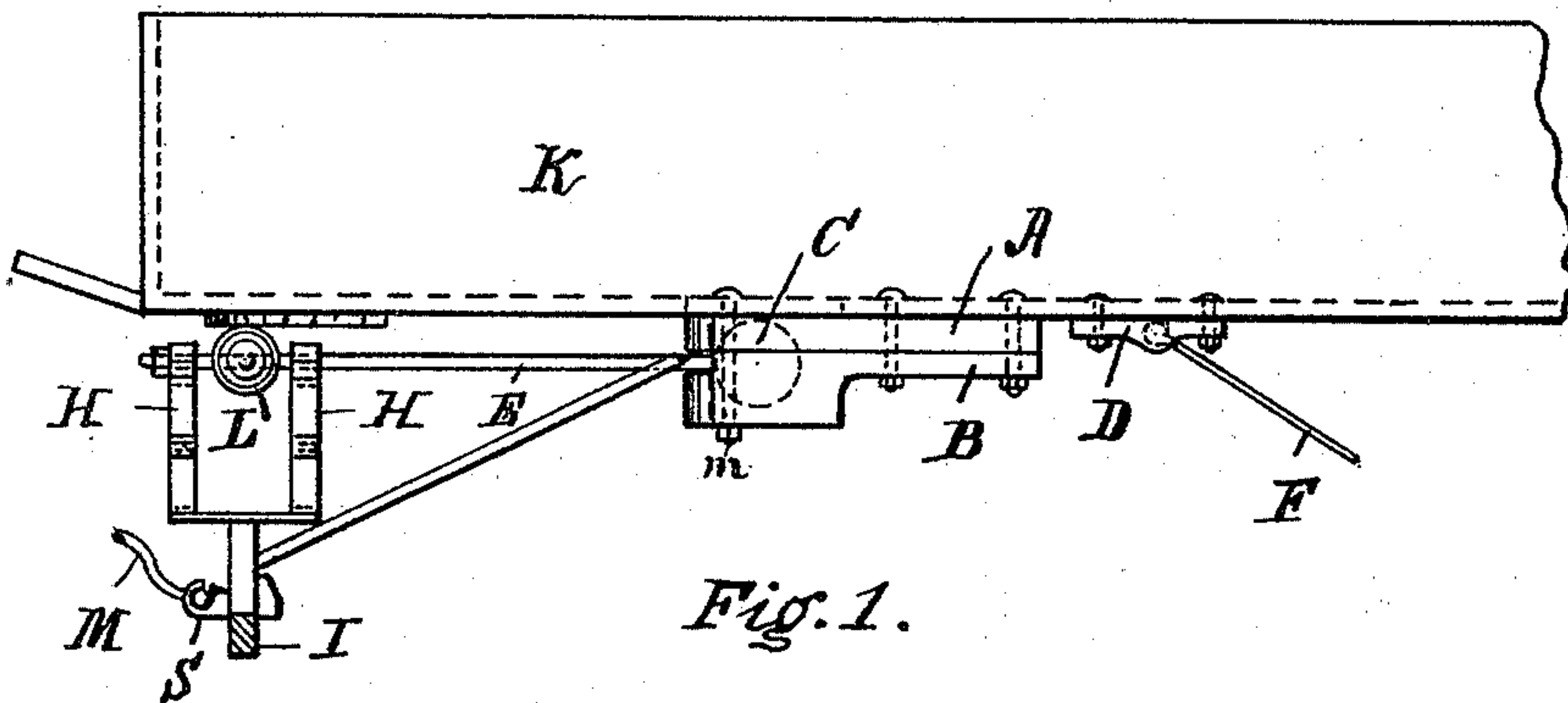


Fig. 1.

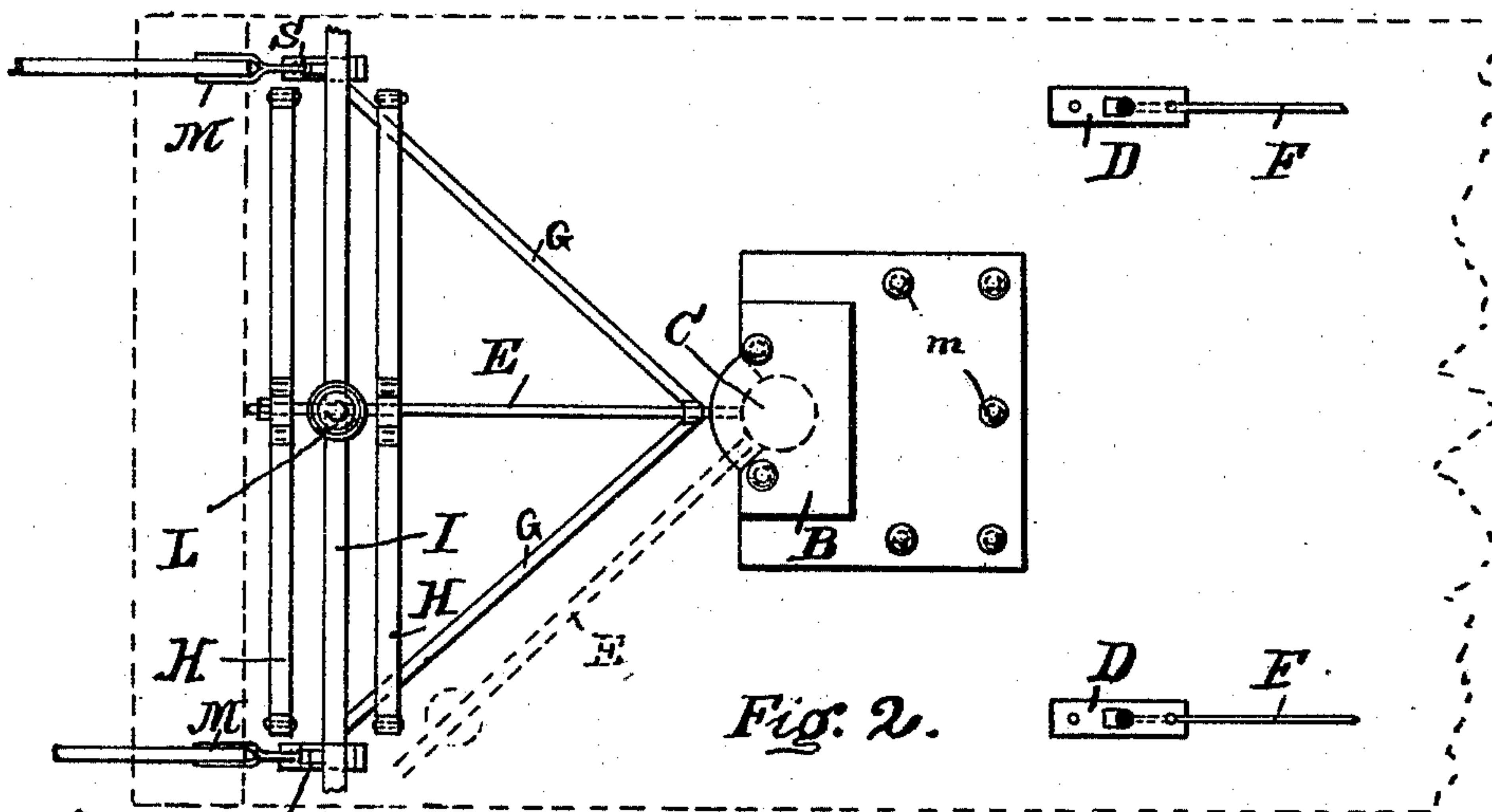


Fig. 2.



Fig. 4.

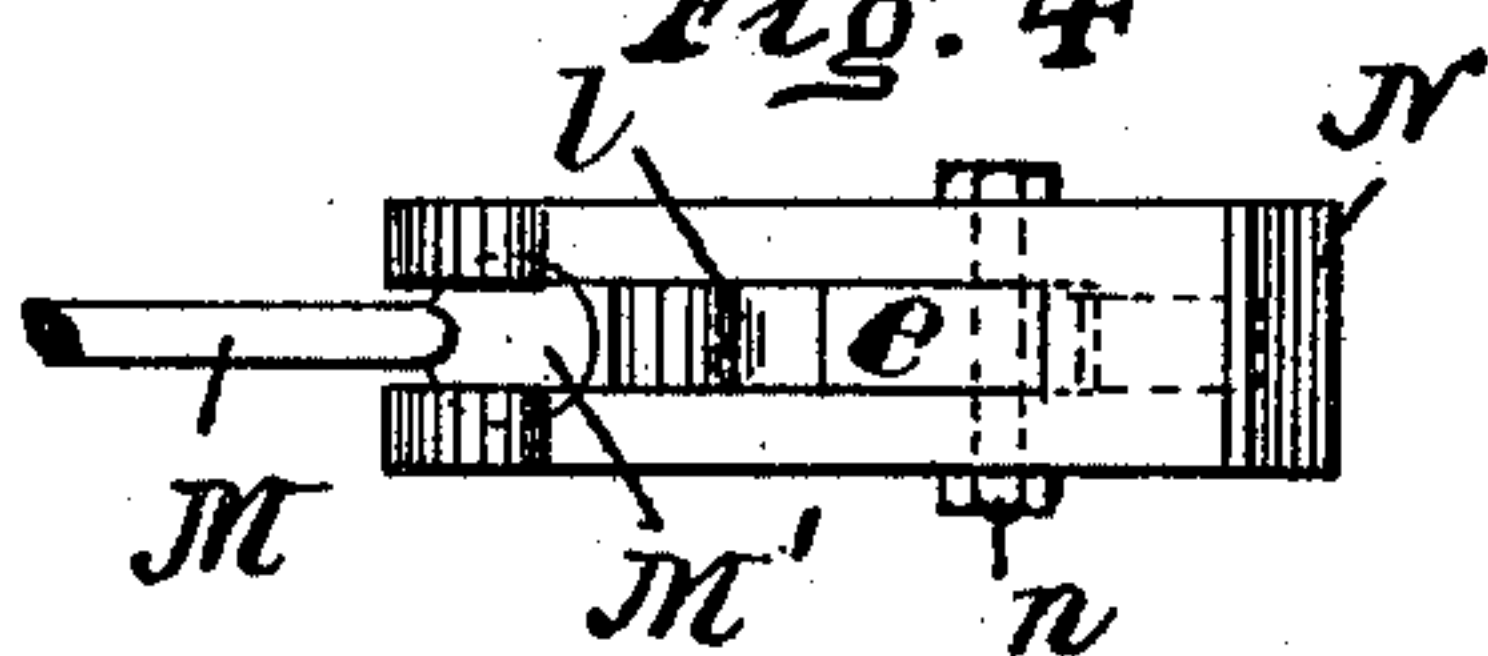


Fig. 5.

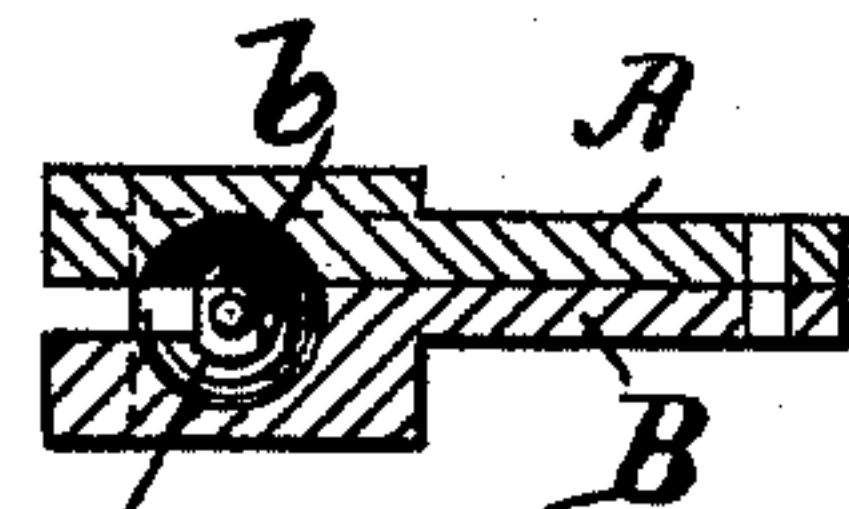


Fig. 3.

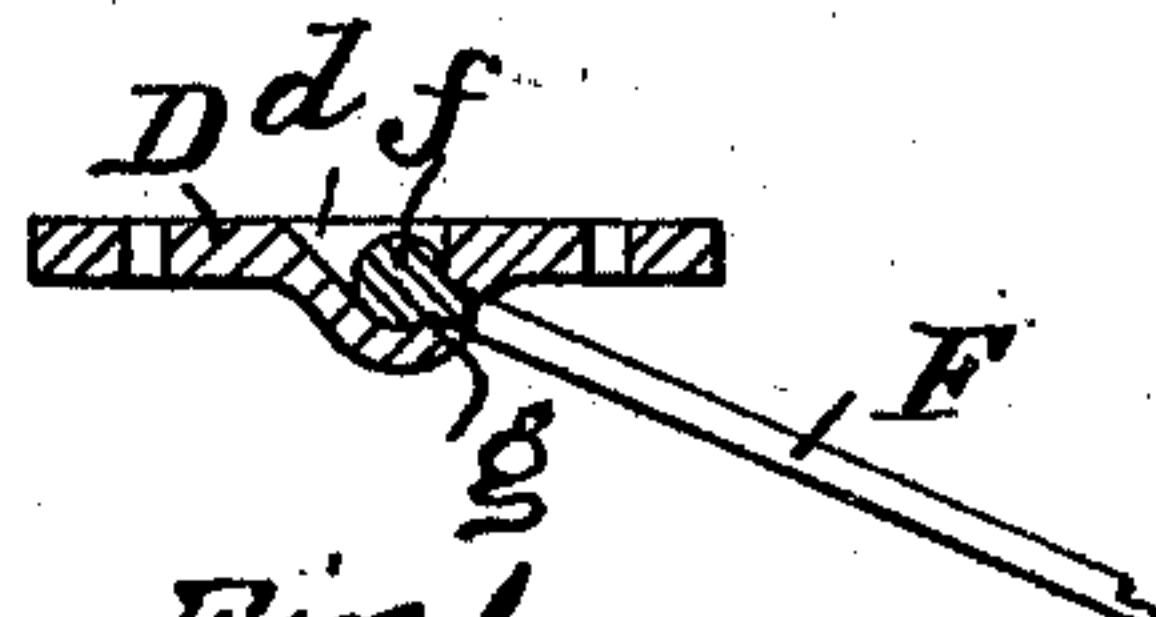


Fig. 6.

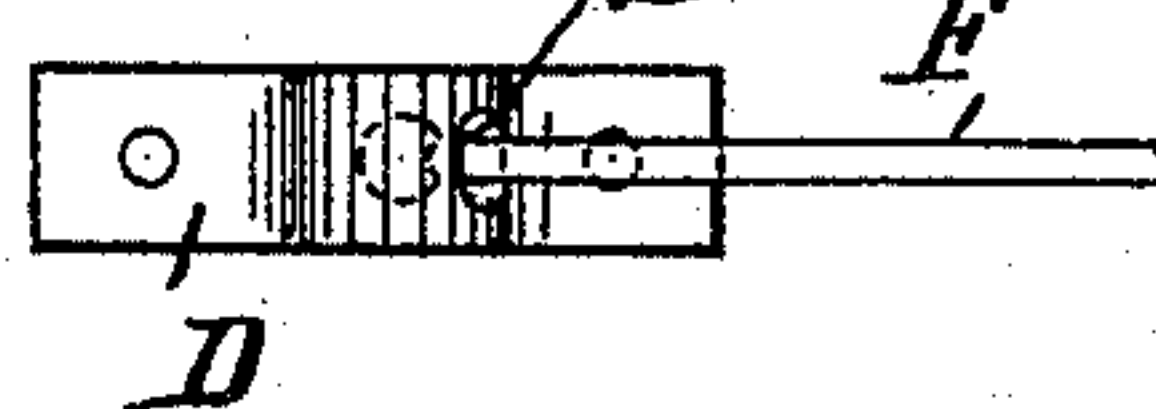


Fig. 7.

Witnesses.

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# UNITED STATES PATENT OFFICE.

EDGAR W. LOOMIS, OF ELGIN, ILLINOIS.

## WAGON OR OTHER VEHICLE.

SPECIFICATION forming part of Letters Patent No. 585,768, dated July 6, 1897.

Application filed July 6, 1896. Serial No. 598,186. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR W. LOOMIS, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Wagons or other Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of wagons and other vehicles in common use.

My invention consists in a ball or sphere, of metal or other suitable material, which is made to occupy hemispherical cups or cavities, one-half of its diameter in each, said cavities being formed, respectively, in the upper and lower surfaces of two rectangular plates of equal dimensions, the ball or sphere being mounted on one end of a rod or shaft.

It further consists of a ball or sphere mounted on said rod, loosely or otherwise, and so arranged as to support the front end of the bed, and on which the front end of the bed is permitted a lateral or side motion.

It further consists in the mechanism and devices more fully described and claimed.

Referring to the drawings, Figure 1 represents a side elevation of the forward portion of a wagon-body having my devices; Fig. 2, an inverted plan; Fig. 3, a longitudinal vertical sectional view through center of the hemispherical cup-plates; Fig. 4, a longitudinal vertical sectional view through center of thill-coupling; Fig. 5, a top plan of thill-coupling; Fig. 6, a longitudinal vertical sectional view through center of bracket and end of connecting-rod, and Fig. 7 a plan of bracket and connected end of rod.

In the drawings, A and B designate rectangular companion bed-plates, having at their inner surfaces hemispherical cups or cavities *b*, into which is placed a ball or sphere C, which fits the cavity *b* loosely, allowing a free motion of the same.

E is a rod or shaft upon one end of which is mounted the ball C, and to which is attached stay-rods G G near the ball, the opposite ends of the stay-rods being secured to the front axle I. Duplex springs H H are placed each side of the axle, and between the springs a ball or sphere L is mounted loosely

or otherwise on the rod or shaft E, upon which the front end of the wagon-bed rests and upon which it is permitted a lateral movement.

The bed-plates A and B are secured to each other by bolts in such a relative position that each plate embraces one-half the diameter of the ball C in its circular cavity, the front surfaces of the plates being cut away to allow free lateral motion of the rod E.

D is a bracket preferably attached to the bottom of the wagon-bed; F, the rod, which, provided with a knob *f* or enlargement on its end, connects the bracket to the rear axle. The bracket D is hollowed out in the back side, leaving an opening *d*, through which the rod F is passed.

The wagon-bed K rests centrally in the ball C, which constitutes the point of resistance in the draft of the vehicle, and the motive power is applied to the front axle I by means of the shaft M, having the ball end M' and the clip N, which is composed of two parallel pieces, and having a base of the same general shape and dimensions inserted between them which rests upon a lever-spring *h* and is permitted to oscillate on a center pin *n*. As the front end of the bar *e* is pressed down it opens the loop or hook S and permits the ball of the shaft to drop into the loop or hook, where it is held in place by the reaction of the spring *l*.

It will be seen that in this manner of the construction of a wagon or other vehicle the ball C performs the functions of both king-bolt and fifth-wheel as wagons are usually constructed.

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

In a wagon or other vehicle the ball C mounted on a rod E, the bed-plates A and B provided with hemispherical cavities *b*, the ball L mounted on the rod E, all constructed and operating in the manner and for the purposes herein set forth and described.

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

EDGAR W. LOOMIS.

Witnesses:

W. T. DENNIS,  
J. C. BOONE.