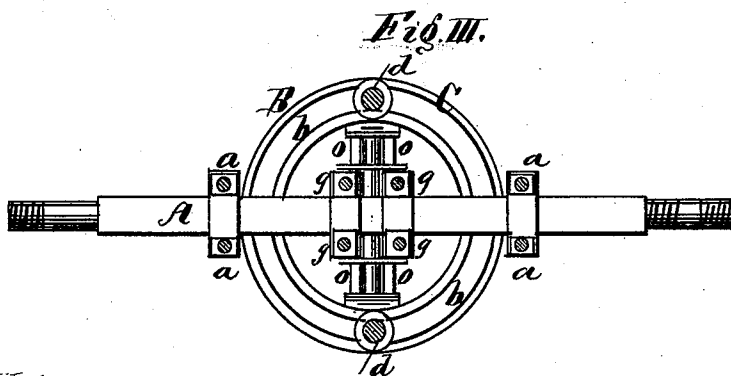
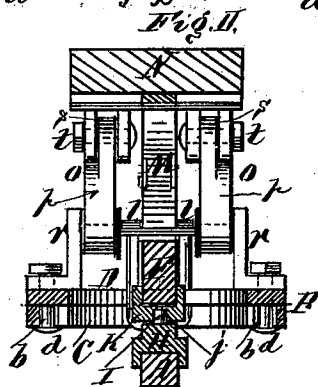
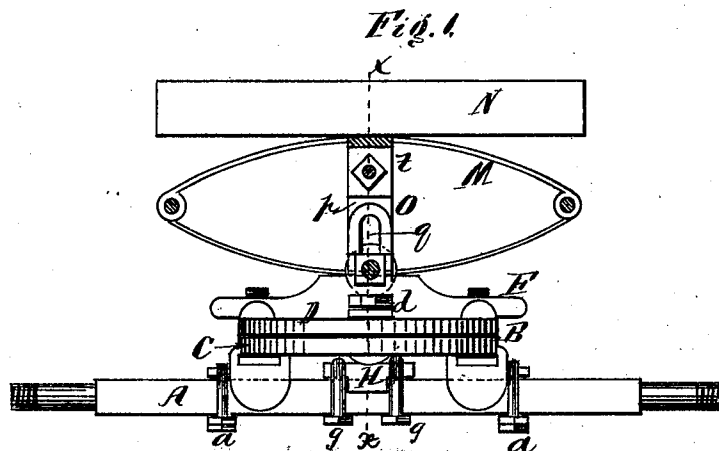


M. GLUCK.
Vehicle-Spring.

No. 167,892.

Patented Sept. 21, 1875.



Witnesses:
Franklin Barritt
Richard Cerner.

Inventor:
Moritz Gluck,
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Atty

UNITED STATES PATENT OFFICE

MORITZ GLUCK, OF NEW YORK, N. Y.

IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. **167,892**, dated September 21, 1875; application filed June 29, 1875.

To all whom it may concern:

Be it known that I, MORITZ GLUCK, of New York city, in the county and State of New York, have invented certain Improvements in Wagons, of which the following is a specification:

The object of my invention is to simplify and cheapen the construction of wagons, carriages, and vehicles by constructing the fore part in such a manner that neither a reach nor any other connections between the front and rear part of the wagon are required, with exception of the box or body of the wagon.

Referring to the drawings accompanying this specification, Figure I represents a front view of the fore axle, fifth-wheel, spring, and connections of a wagon. Fig. II is a sectional view on line *x x*, Fig. I. Fig. III is a bottom view of Fig. I.

A is the axle, to which is fastened on the top and in the center, by clips *a a*, the lower half C of a circular disk or fifth-wheel, B, which is provided with a circular vertical groove, *b*, at or near its outer edge, the center of the disk being cut away for lightness, and to allow the same to revolve on a center pin, to be more fully described hereafter. On the top of disk B is placed the upper half D of the disk or the fifth-wheel B. These two halves are held together by two bolts, *d d*, passing through holes in the upper half D, and extending downward into the groove *b*. These bolts not only hold the parts together, but allow the same to revolve freely. On the top of the disk B is bolted the cross-bar F. On

the top and in the center of the axle A is bolted, by clips *g g*, the box or bearing H, from which extends upward the center pin or pivot I, which fits into a seat or hole, *j*, in another box or bearing, K, fastened to the under side of the cross-bar F. On the top of the cross-bar F is placed and fastened an elliptic spring, M, to the top of which the wagon box or body N is fastened.

As the front and rear parts of the wagon are only held and connected together by the box N, it will be readily understood that the parts of the fore part are exposed to a severe strain. To counterbalance the influence of such strain connecting-links O O are placed between the disk B and the wagon body N, and placed on the sides of the spring M. These connecting-links are constructed of the center piece *p*, in the lower part of which is a groove, *q*, which allows the piece *r*, fastened to the upper part of disk B a free play upward and downward but not sideward. The top of the center-piece *p* is connected, with hinge *s*, to the top piece *t*, which allows of a free side movement of the wagon-body.

Having thus described my invention, I desire to claim—

The connecting-links O O, in combination with the spring M, wagon-body N, and disk B, substantially as and for the purpose set forth.

M. GLUCK.

Witnesses:

RICHARD GERNER,
FRANKLIN BARRITT.