

No. 615,797.

Patented Dec. 13, 1898.

W. J. BROWN.
CARRIAGE GEAR.

(Application filed Jan. 30, 1897.)

(No Model.)

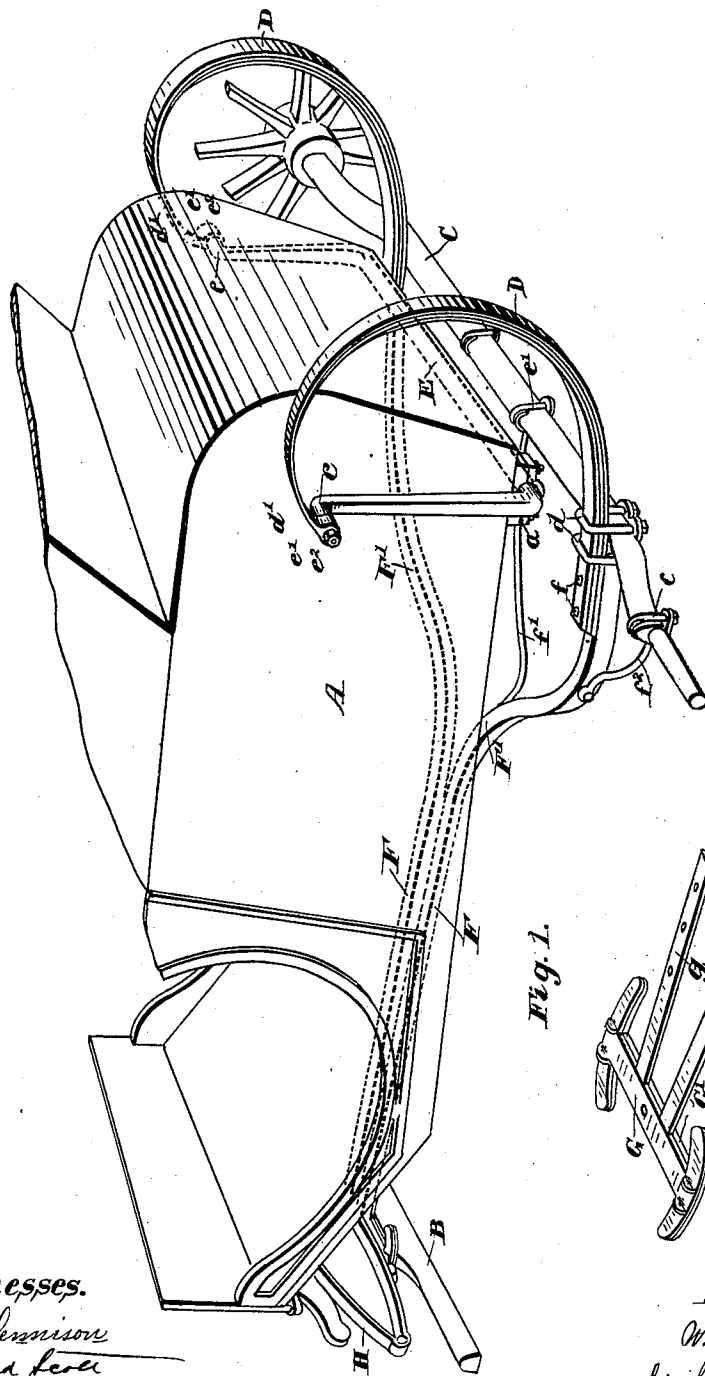


Fig. 1.

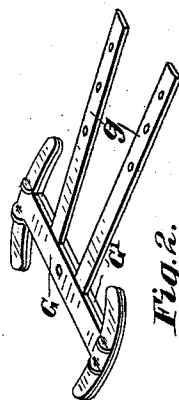


Fig. 2.

Witnesses.

H. W. Morrison
Alfred Lewis

Inventor.

W. J. Brown.
by Featherstonhaugh & Co
Attys

UNITED STATES PATENT OFFICE.

WILLIAM JAMES BROWN, OF TORONTO, CANADA.

CARRIAGE-GEAR.

SPECIFICATION forming part of Letters Patent No. 615,797, dated December 13, 1898.

Application filed January 30, 1897. Serial No. 621,308. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JAMES BROWN, carriage-builder, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Carriage-Gears, of which the following is a specification.

My invention relates to improvements in carriage-gears; and the object of the invention is to provide a very cheap, simple, and resilient spring-gear for a carriage or buggy which will support the body in such a manner as to more effectually relieve and overcome the jolting of the carriage-body more than other gears at present in use for this purpose; and it consists, essentially, of peculiarly-formed C-springs secured above the axle, pivotally connected at the top to a U-shaped axial support for the body, which is suitably and preferably journaled at the bottom of the body, and, further, of a double reach, also forming at the rear portion a support for the C-springs, such double reach extending to the front top portion of the fifth-wheel of the vehicle, upon which an elliptical spring is secured, which serves to support the front portion of the body, the parts being constructed and arranged in detail, as herein-after more particularly explained.

Figure 1 is a perspective view of the major portion of the body and the peculiar form of running-gear for supporting the same to which my invention relates. Fig. 2 is a detail of the fifth-wheel and its connection to the double reach.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the body of the vehicle, which is made of wood or any other suitable material.

B is the front axle, and C the rear axle.

D are C-springs which are formed, preferably, with a plurality of leaves and are secured at the bottom above and to the axle by the clip-bolts *d*. The upper end of the C-springs D is formed with eyes *d'*.

E is a U-shaped axial support, the base of the U of which is preferably formed round and journaled in suitable bearing-brackets *a*, secured to the bottom of the body.

e are the outwardly-extending ends of the

support E, which have ends or stems *e'*, that extend through the eyes *d'*, formed on the end of the C-springs. The outer end of each stem *e'* is threaded and provided with a nut *e²*, which secures the I-shaped end of the C-springs from lateral displacement.

F F are the double reaches, the rear ends F' F' of which are flared outwardly and extend underneath the bottom front end of the C-springs, to which they are secured by bolts *f*. The reaches are also preferably rendered rigid at the rear by the braces *f' f²*, which are bolted at one end to the reach and secured at the other end to clips *cc'* on the axle. The forward ends of the double reach F F extend to the rearwardly-projecting bars *g g*, which are attached to or form part of the upper portion G of the fifth-wheel. The lower portion G' of the fifth-wheel is secured on top of the axle B.

H is an elliptical spring formed in a manner common to such carriage-springs and suitably secured to the top G of the fifth-wheel and to the bottom of the front of the body A.

It will be seen from the construction hereinbefore described that the body A will be supported in such a manner that it will be relieved from the jolting and also have an endwise swinging movement upon the top of the C-springs, which I find in practice makes the vehicle very comfortable to ride in.

What I claim as my invention is—

The combination with the front and rear axles and fifth-wheel, of the double reach having a narrowed front portion connected to the stationary portion of the fifth-wheel and a flaring rear portion and the C-springs secured to the flaring rear end of the rear portions of the reach and clipped to the axle and the substantially U-shaped body-loop having the cross-bar of the loop journaled in bearings at the bottom of the body and the arms of the U extending forwardly and outwardly and pivotally connected to the upper ends of the C-springs as and for the purpose specified.

WILLIAM JAMES BROWN.

Witnesses:

B. BOYD,

H. DENNISON.