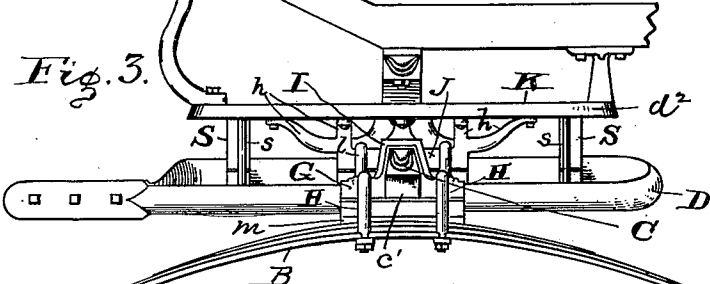
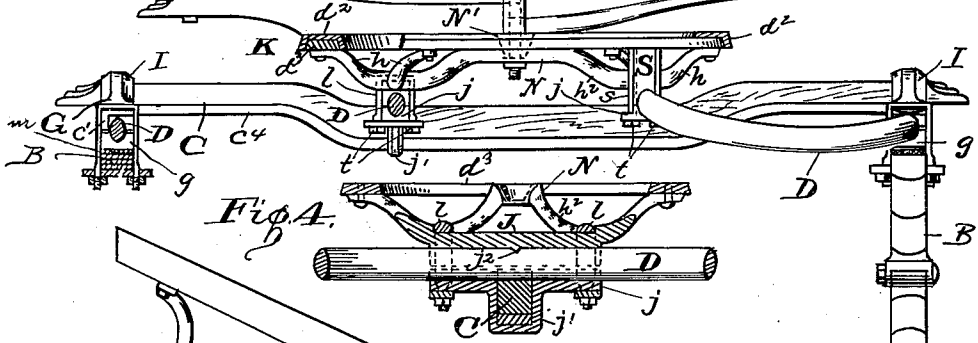
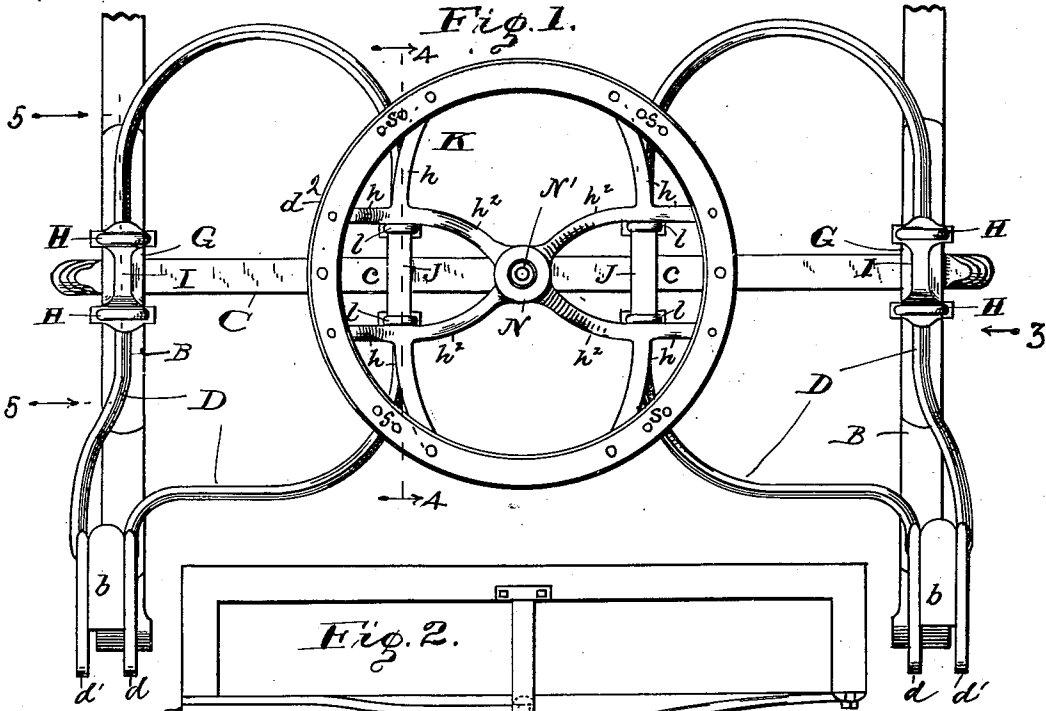


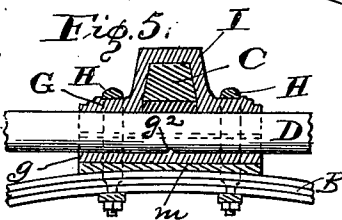
T. H. PARRY & J. McCLINTOCK.
FRONT GEAR FOR VEHICLES.

(Application filed Mar. 28, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

THOMAS H. PARRY AND JOSEPH McCLINTOCK, OF INDIANAPOLIS, INDIANA,
ASSIGNORS TO THE PARRY MANUFACTURING COMPANY, OF SAME PLACE.

FRONT GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 650,478, dated May 29, 1900.

Application filed March 26, 1900. Serial No. 10,157. (No model.)

To all whom it may concern:

Be it known that we, THOMAS H. PARRY and JOSEPH McCLINTOCK, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Front Gear for Vehicles, of which the following is a specification.

The object of this invention is to provide a one-piece futchell and wheel-iron stay for the front portion of the gear of wheeled vehicles and attach it in a novel and secure manner to the cross-bar without cutting the latter away in a manner to materially weaken it and to attach said combined futchell and wheel-iron to the elliptic springs and fifth-wheel of the vehicle in a specially secure and durable manner.

The invention also relates to the manner of supporting the fifth-wheel and to certain features of its construction and arrangements of parts, all of which will be hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, in which like letters of reference indicate like parts, Figure 1 is a top plan view of our invention; Fig. 2, a detail in rear elevation of same, showing the combined futchell and wheel-iron on one side and part of the fifth-wheel in vertical section. Fig. 3 is a detail in side elevation looking in the direction of the arrow 3, Fig. 1. Fig. 4 is a detail in vertical section on the line 4 4 of Fig. 1, and Fig. 5 is a detail on the line 5 5 of Fig. 1.

B B are elliptic springs, which are secured in any well-known and suitable manner to the forward axle of the vehicle, a portion of said axle being shown at A, Fig. 2, and C is the cross-bar, of usual construction.

D D are the combined futchell and wheel-irons, the futchell being the part from d to c and the wheel-iron being the part from c to d' , which parts under those names have been made separately and their adjacent ends attached by well-known means to the cross-bar C. The parts D D will preferably be of spring-steel oval in cross-section, and the ends which approach each other toward the forward end of the vehicle are applied to blocks $b b$ and project somewhat forward of the blocks to form ears or lugs for the attachment of the

thills or pole. The outer portions of the parts D pass to the rear from the blocks $b b$ and between the cross-bar C and the elliptic springs, to which they are applied by means of the blocks g , having longitudinal grooves to receive and fit the parts D and forming the lower halves of boxes of which G are the upper portions, having under side grooves to receive the parts D. These are clamped to the parts D and are secured to the springs B B by the clips H. A bearing-plate m may be interposed between the blocks $g g$ and the springs B B. The top boxes G G have central arches or loops I I to receive the ends of the cross-bar C, the end of the iron c^4 on the under side of which is turned down at c' against the outside of box G to prevent spreading apart of springs B B. To prevent longitudinal movement of D D in the above mentioned boxes, we provide lug or flange g^2 to enter a corresponding notch in D D. (See Fig. 5.)

J J are parallel iron blocks preferably forming integral portions of the fifth-wheel K. These blocks are grooved longitudinally on their under sides to receive the upper portions of futchell and wheel-irons D D. $j j$ are correspondingly-grooved lower blocks which form boxes with blocks J J to hold parts D D, to which said boxes are clamped by clips $l l l$. The under blocks $j j$ have downwardly-projected loops $j' j'$ to pass around the cross-bar C, and to permit said bar to pass the central portions of the latter will be removed in the manner as clearly shown in Fig. 4 and the ends connected by the loops $j' j'$. The cross-bar C will pass under the futchell and wheel-irons D D without notching the latter or cutting it away, except very slightly to keep the parts D D from sliding on said bar. The top groove of the box will have a lug j^2 to enter a detent in part D to prevent sliding movement. It will be noted that this box extends a considerable distance on either side of cross-bar C, which is to give an ample bearing to the fifth-wheel on parts D D. The fifth-wheel consists of an outer rim or circle d^3 , preferably wrought iron or steel, with downwardly-sloping edges to make it broader at the base. This rim is supported by eight arms h , which attach to the rim at points

which are equidistant from each other in order to equally support the rim, and the arms are connected in two groups of four each with the two blocks J J. A center plate N has a downwardly-tapering socket N', which latter is concentric with the circular rim d^3 . The top of plate N is raised above the blocks J J and is approximately on a level with the top of the rim. It is supported by the four arms h^2 , which are integral with the said plate and with the blocks J J. The top circle d^2 of the fifth-wheel rests on top of the circle d^3 . It has inside and outside downwardly-projected flanges, between which the rim is seated. These flanges have a flare to suit the obliquity of the sides of the lower rim or circle. The king-bolt is attached through an opening in plate N. It has an inverted truncated conical end, which is seated in the tapering socket N', whereby the wear of the parts will not get them out of center, but will insure a perfect concentric fit.

We have now to describe a construction that ranks among the most important of our improved features—viz., the standards S, by which the rim of the fifth-wheel is supported at four equal points from the futchell and wheel-irons D D. The points of attachment are indicated in Fig. 1 by the bolt-heads s. These pass down through the head and on either side of standards S. The latter is notched on its lower end to receive the part D, and a correspondingly-notched plate is secured on the under side of D by nuts t on the threaded ends of the bolts s. These four standards overcome a former serious difficulty occasioned by the breaking down of the gear after short use by the strain put on the unsupported rim of the fifth-wheel-wrenching positions to which a vehicle is subjected.

We are aware of the Patent No. 466,252, issued December 29, 1891, and do not claim the construction there shown.

Having thus fully described our invention, what we claim as new, and wish to secure by Letters Patent of the United States, is—

1. The combination, in the front gear of

wheeled vehicles, of the axle, the springs B B, the cross-bar reaching from one of said springs to the other, the one-piece futchell and wheel-iron elliptical in cross-section, two-part boxes divided horizontally and grooved longitudinally to form seats to receive the futchell and wheel-irons, the top parts of said boxes being arched or looped to receive the ends of the cross-bar, and clips to clamp the boxes to the elliptical irons and to clamp said boxes to the cross-bar and to the elliptical springs, substantially as shown and described.

2. The combination, in the front gear of a wheeled vehicle, of futchell and wheel-irons made in one continuous piece as shown, a fifth-wheel having a raised center plate with a downwardly-tapering opening connected to an outer rim in the same plane and standards giving the rim a direct attachment to and support from the futchell and wheel-irons, substantially as described and shown.

3. The combination, in the front gear of a wheeled vehicle, of futchell and wheel-irons made each in continuous pieces as shown, a fifth-wheel having a raised center plate with a downwardly-tapering opening, a rim in the same plane with the plate and connected therewith by arms integral with the plate, half-boxes integral with the said arms and having under side grooves to receive the futchell and wheel-irons, a cross-bar passing under the futchell and wheel-irons, lower half-boxes having upper grooves to receive the futchell and wheel-irons and adapted to be clamped under the upper boxes, said under half-boxes having depending loops to embrace the cross-bar, and clips to clamp the parts of the boxes together, substantially as described and shown.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, this 21st day of March, A. D. 1900.

THOMAS H. PARRY. [L. S.]

JOSEPH McCLINTOCK. [L. S.]

Witnesses:

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