L. C. MINER.

Running-Gear.

No. 24,398. Patented June 14, 1859

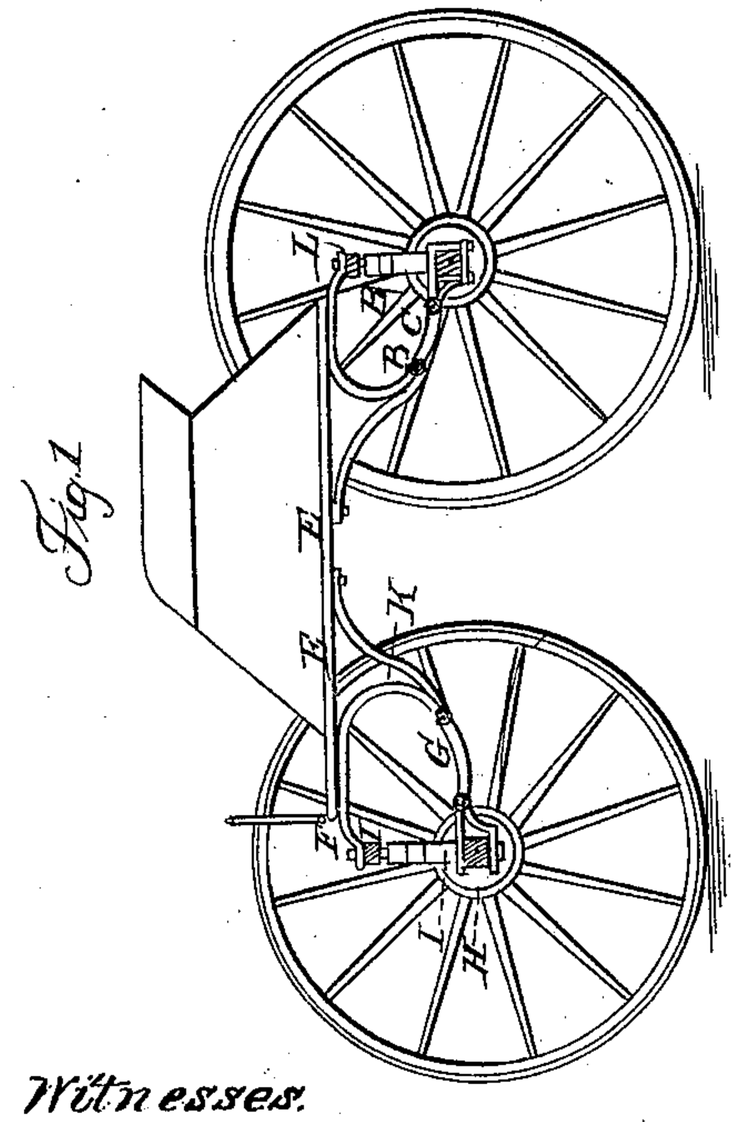

Fig. 1

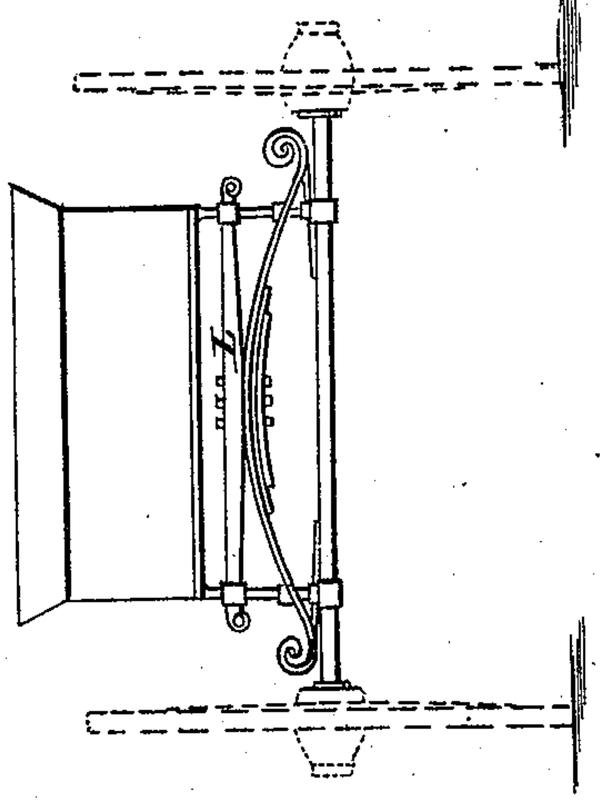

Fig. 2.

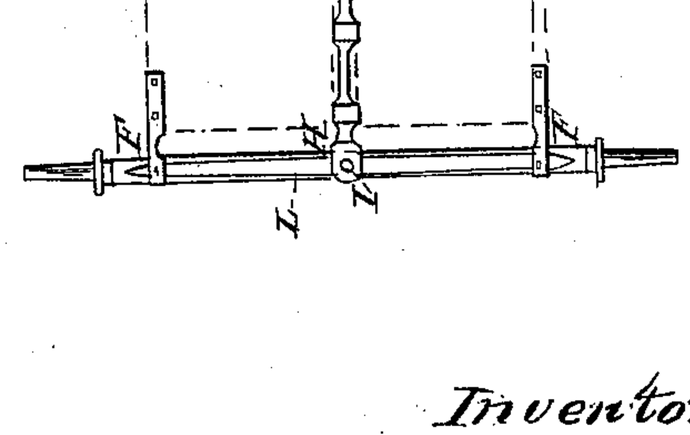

Fig. 5.

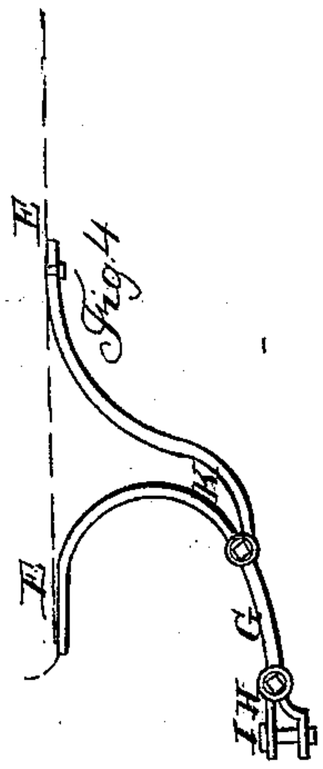

Fig. 4

Fig. 6.

Fig. 3

Witnesses.

Wm Vme

A Baldwin

Inventor.

Leman C Miner

UNITED STATES PATENT OFFICE.

LEMAN C. MINER, OF HARTFORD, CONNECTICUT.

HANGING CARRIAGE-BODIES.

Specification of Letters Patent No. 24,398, dated June 14, 1859.

To all whom it may concern:

Be it known that I, LEMAN C. MINER, of the city of Hartford, county of Hartford, and State of Connecticut, have invented new and useful Improvements in the Mode of Constructing Carriages; and I do hereby declare that the following is a correct description thereof, reference being had to the accompanying drawing and the letters of reference marked thereon.

The nature of my invention consists in the mechanical arrangement and application of variously jointed scroll supports and braces to the body of any two or four wheeled vehicles, in the place of the usual main connecting perch and attachments.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

The drawing Figure 1 is the side view of a buggy with the two near wheels removed—to show the scrolls, &c.; Fig. 2 a back view of the same; Fig. 3 plan of the bottom of the body; Fig. 4 front scroll and joints (enlarged); Fig. 5 back scroll and joints (enlarged); Fig. 6 corner front irons.

The body wheels shafts and other mechanical parts of a vehicle, will be made to any pattern that fancy may dictate.

The main connecting perch and other attachments extending from the front to the back axles, as in the usual custom, I dispense with altogether, and apply my improvements as shown in the plan: (viz) to the front axle in the center of the same, I attach the jointed shackle H and king bolt I, and to the joint of the same the connecting rod G, is attached, and also the joint of the front scroll braces K which continue up to the middle bottom strap E to which they are permanently fixed. This comprises my main front center attachment. Two small hanging loops F F are fixed at each front corner of the body to support the same, hanging to and on the ends of the spring bar L. This combination of the horizontal joint H of the shackle bar and king bolt I on the vertical joints of the connecting rod C and scroll K allow an easy freedom of motion and action both vibratory and vertical to the body of the carriage, with every movement required without jar or trembling.

The two back scrolls and joints B C B are attached to each of the back corners of the body hanging irons and to the ends of the back spring bar L with a clip strap and screws, so that the combined action of the joints of the connecting rods *c*, and scrolls allow a free and easy vertical movement to the body. A clip strap and bolts D fasten the whole to the main back axle.

The middle bottom strap E is permanently fastened to the bottom of the body, also the side irons M M to receive the scrolls.

The utility of hanging the body of vehicles in the manner as herein described, is in the economy of construction, neatness and lightness of appearance, combining with strength a free and easy motion.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The application of the double jointed shackle H to the front axle, whereby the vertical position of the spring and axle is sustained, and the fifth wheel and appendages dispensed with.

2. The back axle braces with double joints B, B, to admit a free and easy vertical motion of the springs, and supporting the axle in its upright position, substantially in the manner as herein described.

LEMAN C. MINER.

Witnesses:

WM. VINE,

ERASTUS SMITH.