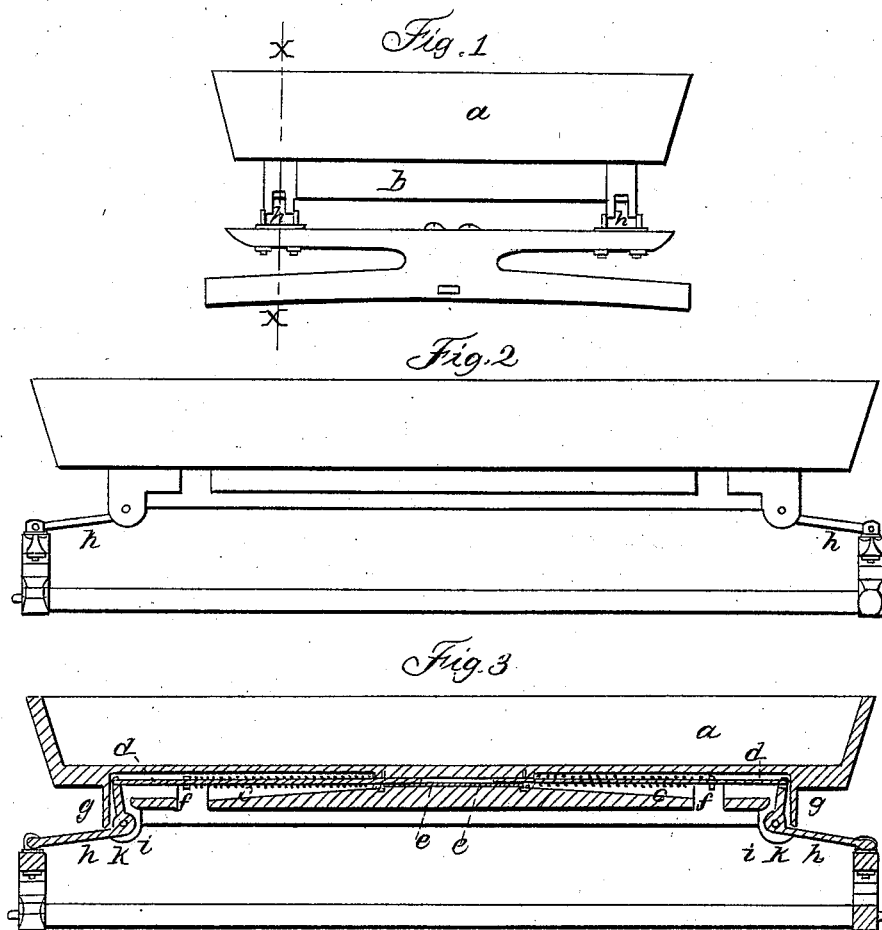


J. MAXSON.
Carriage-Spring.

No. 4,998.

Patented Mar 6, 1847.



UNITED STATES PATENT OFFICE.

JOHN MAXSON, OF DE RUYTER, NEW YORK.

IMPROVEMENT IN HANGING CARRIAGE-BODIES.

Specification forming part of Letters Patent No. 4,998, dated March 6, 1847.

To all whom it may concern:

Be it known that I, JOHN MAXSON, of De Ruyter, in the county of Madison and State of New York, have invented a new and useful Improvement in the Method of Hanging Carriage-Bodies; and I do hereby declare that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a back elevation of a carriage hung on my improved plan; Fig. 2, a side elevation of the same, and Fig. 3 a longitudinal vertical section taken at the line XX of Fig. 1.

The same letters indicate like parts in all the figures.

Helical springs have heretofore been employed for hanging carriage-bodies; but in all cases they have been so arranged that the springs were necessarily very short, and therefore having very little play, and either so exposed or requiring such connections as to injure the appearance of the carriage; but by my improvement I avoid these defects.

The nature of my invention consists in arranging the sustaining helical springs longitudinally along the bottom of the carriage-body, where they may be inclosed in an ornamental bed-work, when this is combined with rods passing through the springs to keep them straight, and with flanges or washers to act against their outer ends to compress them, and with bent levers turning on fulcrum-pins on the bottom of the carriage-body, and one arm jointed to the frame of the running-gear and the other bearing against the outer ends of the rods.

In the accompanying drawings, *a* represents the carriage-body with a sunken bottom *b*, and *c c* the two helical springs on one side, the other side of the carriage being arranged in the same manner. These springs are partly let into grooves in the wood-work, and secured

by their inner ends. They also have rods *d d* passing through them, which are guided by passing through holes at *e e*, and have each a collar *f f*, that bears against the outer ends of the springs, so that when these rods are forced inward by the weight of the carriage they compress the springs, which action is effected by having the outer extremity of each rod either resting against the short vertical arm *g* of the levers *h h* by what is termed a "rolling-joint" or otherwise connected therewith, the said levers *h h* turning on fulcrum-pins *i i* in brackets *k k*, attached to the bottom of the carriage-body, the other arm *h* of these levers, which is nearly horizontal, being jointed to the frame of the running-gear of the carriage, so that when the body of the carriage descends the arms *g* of the bent levers are forced inward and compress the springs, the rods acting as guides to keep them in proper line. By this arrangement the springs can be made of any desired length and are concealed, and the levers forming the connection can be so curved as to add to the beauty of the carriage, and yet are accessible for oiling, and may be readily repaired.

I do not claim, simply, the employment of helical springs as a means of hanging carriage-bodies, nor simply connecting the springs with the carriage by means of levers, as these are all well known; but

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

Arranging the helical springs that support the carriage horizontally and lengthwise along the bottom of the carriage when this is employed, in combination with the four levers having their arms at right angles, or nearly so, to form the connection between the springs and carriage-body and frame of the running-gear, the whole being constructed and arranged substantially as herein described.

JOHN MAXSON.

Witnesses:

STEPHEN G. SEARS,
BEN BIRDWELL.