

C. H. GUARD.
Carriage-Spring.

No. 8,152

Patented June 10. 1851.

Fig. 1.

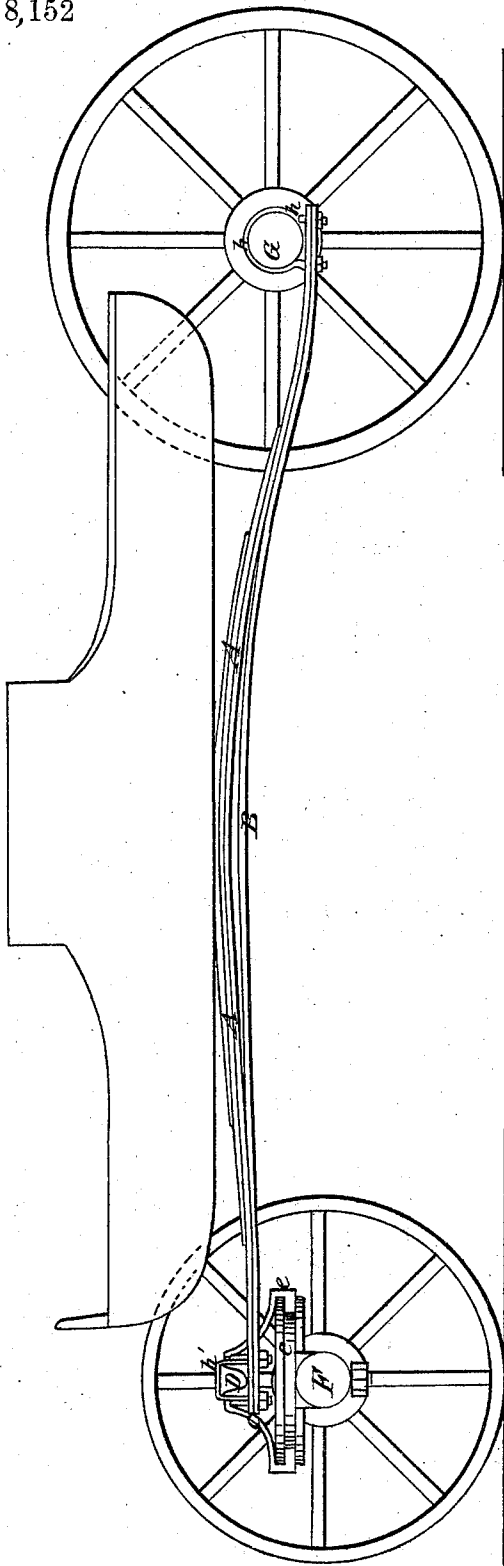
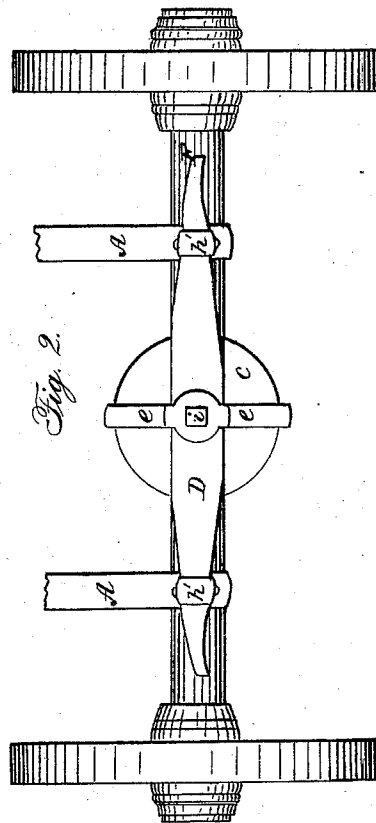


Fig. 2.



UNITED STATES PATENT OFFICE.

C. H. GUARD, OF BROWNVILLE, NEW YORK.

CARRIAGE-SPRING.

Specification of Letters Patent No. 8,152, dated June 10, 1851.

To all whom it may concern:

Be it known that I, CHAUNCEY H. GUARD, of Brownville, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Buggies, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figure 1, being a side view of a buggy, and Fig. 2, a top view of the forward axle of the said buggy, with the bolster and broken sections of the springs connected thereto.

The same letters refer to corresponding parts in both figures.

The nature of my invention consists in the first place, in the combination of spring perches B, B, with the springs A, A, which support the carriage or buggy body in such a manner that the said spring perches, at the same time that they serve to connect the foremost to the hindmost axle, also serve to regulate the action of the carriage supporting springs and prevent them from being strained or injured. And in the second place, my invention consists in the combination of the bolster D, with the forward axle F, through the medium of the fifth wheel C, and the double brace *e*, as represented in the drawings, and hereinafter set forth. The spring perches B, B, are placed immediately below the semielliptic supporting springs A, A, and are secured to the hindmost axle G, and to the bolster D, by the same fastenings *h*, *h'*, as shown in the drawings. The spring perches B, B, have an upward curvature, but do not curve to the same extent and height as do the supporting springs A, A, which produces an open space between the two—save at their extremities.

When sufficient weight is placed in the vehicle to produce a change in the curvature of the supporting springs, the extremities of the said springs will be forced outward, which will cause a tension strain to be

exerted upon the spring perches. The apex of the supporting springs can be made to descend until the spring perches are drawn perfectly straight, when the said perches will act as cords to the then positions of the arched supporting springs and prevent them from yielding farther, which will add greatly to the strength and security of the said supporting springs, and also to their easy and uniform action.

The bolster D, is confined to the forward axle F, through the medium of the grooved fifth wheel C, the double brace *e*, and the bolt *i*, in the following manner; to wit: the fifth wheel C, rests in a recess in the top of the axle; the bolster D, rests upon the fifth wheel; the double brace *e*, passes over the bolster, and the teeth at its extremity pass into the groove in the periphery of the fifth wheel; and the bolt *i*, passes down through the double brace *e*, the bolster D, the wheel C, and the axle F, and securely confines the said parts to each other, in such a manner that the said bolster can be freely rotated upon the fifth wheel, but cannot be oscillated thereon by the action of the supporting springs or the spring perches which are connected thereto.

Having thus fully described my improvements in buggies, &c., what I claim as my invention and desire to secure by Letters Patent, is—

The connecting of the axles of wheeled vehicles by means of curved spring perches which are combined with the supporting springs of the vehicle—that have a greater degree of curvature than themselves—substantially in the manner and for the purpose as herein set forth.

The above specification of my improvements in carriages signed this 3rd day of April, 1851.

CHAUNCEY H. GUARD.

Witnesses:

Z. C. ROBBINS,
P. JEFFERSON.