

J. J. BLACK.
LIGHT-SPRING WAGON.

No. 177,678.

Patented May 23, 1876.

Fig. 1.

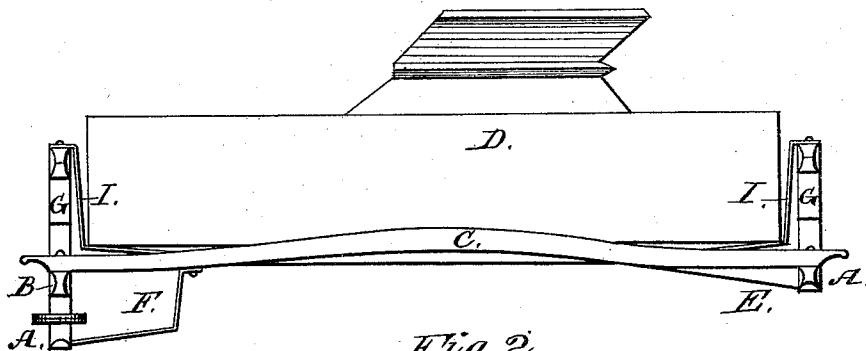


Fig. 2.

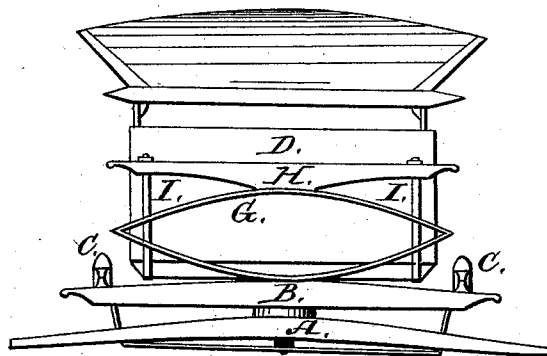
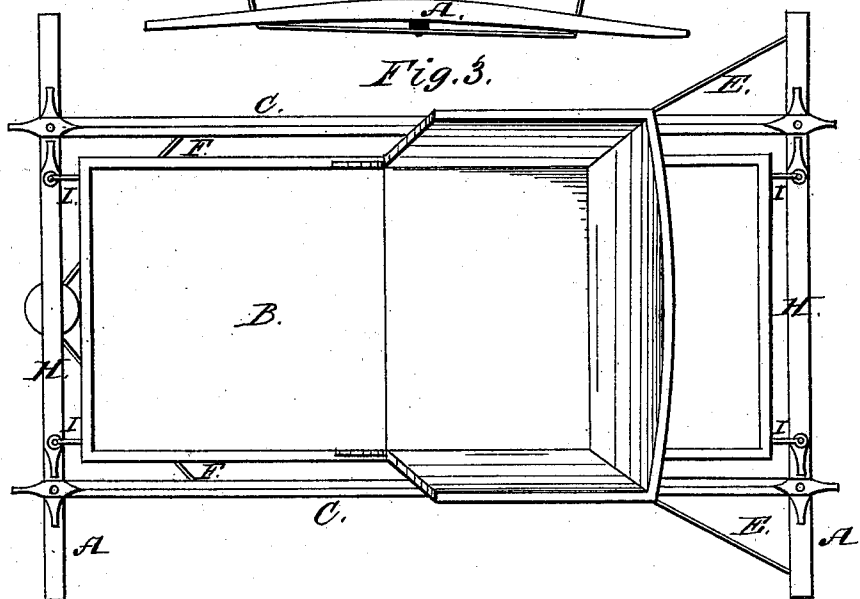


Fig. 3.



Witnesses:

Geo W. Tabbitt
Geo. Mahon

Inventor

John J. Black

UNITED STATES PATENT OFFICE.

JOHN J. BLACK, OF CLEVELAND, OHIO.

IMPROVEMENT IN LIGHT SPRING-WAGONS.

Specification forming part of Letters Patent No. **177,678**, dated May 23, 1876; application filed April 1, 1876.

To all whom it may concern:

Be it known that I, JOHN J. BLACK, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented an Improvement in Buggies, of which the following is a specification:

This invention relates to light spring-buggies, and has for its object to enable the body to be set low, still using the common elliptic springs, by dispensing with the ordinary reach and employing two side spars, between which the body sits, whereby less iron-work is required, still rendering the buggy light, easy, neat, and strong, these being constructed, combined, and arranged as hereinafter more fully described and claimed.

In the accompanying drawing, Figure 1 is a side elevation, Fig. 2 is an end elevation, and Fig. 3 is a plan view, of my improved buggy.

A A are axles, the front one being provided with a fifth-wheel and supporting a bolster, B. C C are side spars, connecting the said bolster with the rear axle, which are spread far enough apart to allow the box or body D to lie and swing between them. They are braced to the axles by irons E E and F F.

To the bolster B and the rear axle A are secured the common elliptic springs G G, having the top bars H H, to which the body D is suspended by the loop-irons I I.

It will be seen that the body sits down well between the springs and side spars C C, and is thus permitted to hang low and have perfect freedom to spring up and down without interfering with the other parts, the result of the arrangement being the production of an economical, durable, light, neat, easy-riding buggy.

I would here state that I do not claim either the springs or side spars separately as new; but

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

The combination and arrangement of the axles A A, bolster B, side spars C C, the body D, braces E E and F F, the springs G G, bars H H, and loop-irons I I, as shown and described, and for the purpose set forth.

JOHN J. BLACK.

Witnesses:

GEO. W. TIBBITS,
F. W. CADWELL.