

A. SEARLS.
Wagon Spring.

No. 71,797.

Patented Dec. 3, 1867.

Fig. 1

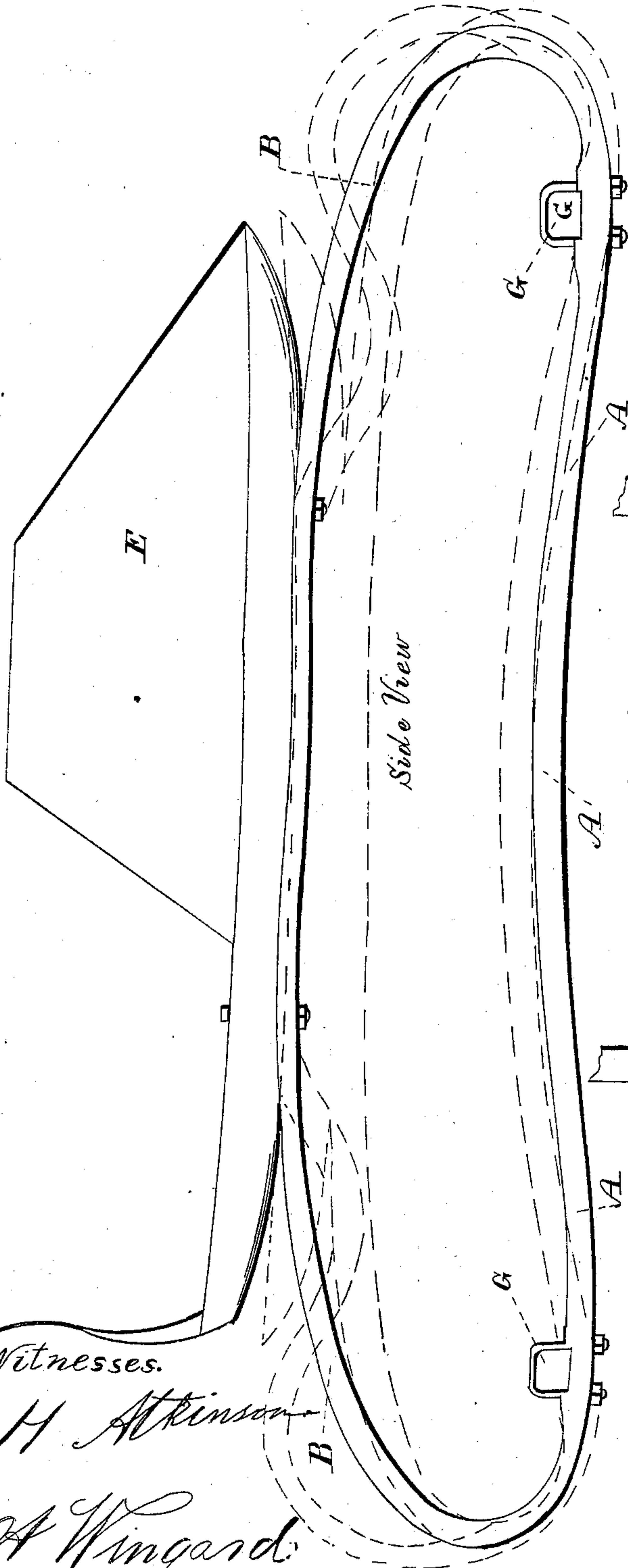
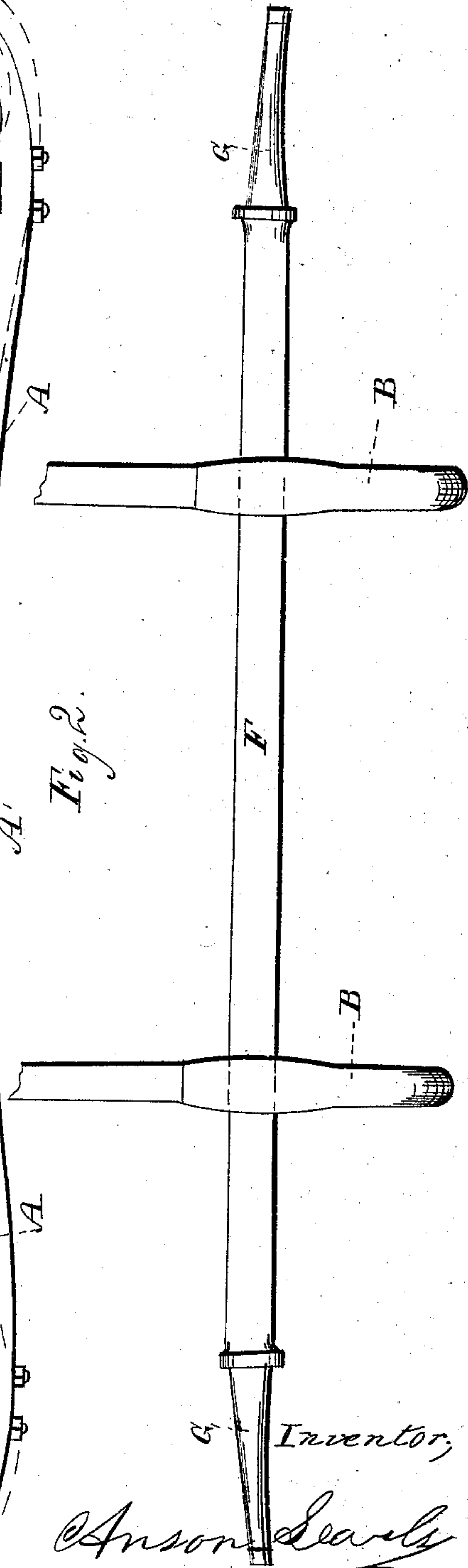


Fig. 2.



Witnesses.

J H Atkinson
A Wingard

Inventor,

Anson Searls

United States Patent Office.

ANSON SEARLS, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 71,797, dated December 3, 1867.

IMPROVEMENT IN WOODEN WAGON-SPRING.

The Schedule referred to in these Letters Patent and making part of the same.

KNOW ALL MEN TO WHOM THESE PRESENTS SHALL COME:

That I, ANSON SEARLS, of the city and county of San Francisco, State of California, have made a new and useful Improvement in Making Wood Springs for Carriages, which I call the "Endless Wood Spring," of which the following specifications and accompanying drawings are a clear and exact description.

The nature of my invention consists in making wood springs for buggies by a combination with the perch, the elasticity of the perch portion acting on the spring portion back to its natural position when the weight is removed.

I also improve the strength and elasticity of the spring beyond the ordinary tension of wood by the particular form shown in the drawings; the weight on the body of the carriages causing a portion of the spring to elongate and the other portion to compress, causing each portion to bring it to react on the other, thereby obtaining elasticity, strength, lightness, and durability.

The spring may be made of one piece, forming a spring and perch, and be made of ash, hickory, lance-wood, or other strong elastic timber, bent around in the desired form, spliced underneath the body. Steel may be combined with the spring in some cases, passing from the axle or head-block to the body, inside or outside of the spring. It also may be placed under the body like the ordinary double-perch buggy, the front ends diverging to each side of the body, and the back ends diverging from the axle to the body, and the effect gained as by the parallel manner.

Figure 1 is a side view of the spring under the body.

A A A are the perch portion, and B B the spring portion attaching to the axle at G and to head-blocks at G. A pressure on the body causes the spring to depress and elongate, throwing the perch up slightly in the middle, as shown in the red dotted lines. When the load is removed the perch reacts and assists the spring to assume its natural position. The spring may be given the form of the black dotted lines, and do away with the action on the perch, but by so doing loses its reaction force to a great degree.

Figure 2 is a top view of the springs and axle.

Claim.

I claim an endless wood spring and perch in combination, substantially as set forth and described.

Signed by me, this eighth day of July, 1867.

ANSON SEARLS.

Witnesses:

JOSEPH H. ATKINSON,
A. WINGARD.