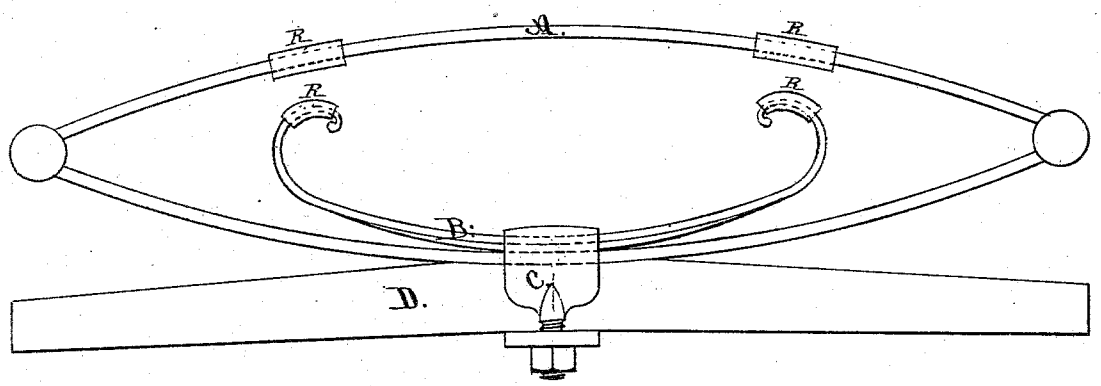
C. SHELDON.

Carriage Spring.

No. 99,249. Patented Jan. 25, 1870.



Witnesses.

Corr Sheldon

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

CARR SHELDON, OF MIDDLEBURG, NEW YORK.

Letters Patent No. 99,249, *dated January* 25 1870.

IMPROVEMENT IN CARRIAGE-SPRINGS.

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

To all whom it may concern:

Be it known that I, CARR SHELDON, of Middleburg, in the county of Schoharie, and State of New York, have invented a new and useful Improvement in Springs for Wagons, Carriages, &c.; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making a part of this specification.

This invention relates to that class of elliptic wagon-springs in which additional leaves are introduced for the purpose of breaking the descent of the upper elliptical portion, when the springs are heavily loaded, and consists in attaching to the said upper elliptical portion, and to the scroll ends of the additional leaves, rubber or leather buffers, for the purpose of preventing the shock resulting from the concussion of the springs, when brought suddenly together, and also preventing the disagreeable noise attending such concussion.

The following description will enable others skilled in the art to make and use my invention.

To any of the common and well-known forms of elliptic or half-elliptic springs A, the additional leaves B are secured, either by the "clip" C, or by bolts, to the bed-piece D. These additional leaves are only secured to one part of the spring, either the lower one, as shown, or to the upper one, as may be most desirable. Their ends do not bear against the spring when relieved from pressure, but are bent around in a scroll-form at any required distance from the opposite half of the spring. This arrangement allows the spring to operate in its usual manner when an undue weight is not placed upon it, but when any sudden strain is thrown upon, or it is overloaded in any manner, the spring, in its descent, meeting with the curved ends of the additional leaves B, is supported and sustained by the increased elasticity imparted by them.

By this means the danger of breaking the spring is materially lessened. The springs for ordinary use may be made much lighter than they are now, and all the requirements of springs for light and heavy work are combined in one arrangement. Should it be found necessary to deaden the noise caused by the striking of the spring upon the additional leaves, a thickness of leather or India rubber can be placed between them for this purpose.

Among the advantages of this spring are its simplicity, reliability, and cheapness.

I do not claim, broadly, the use of the additional leaves B; but

What I do claim as my invention, is—

In combination with the ordinary elliptic spring A and the additional leaves B, the leather or rubber buffers R R, substantially as shown and described.

CARR SHELDON.

Witnesses:

MARTIN C. BORST.

WM. H. LOW.