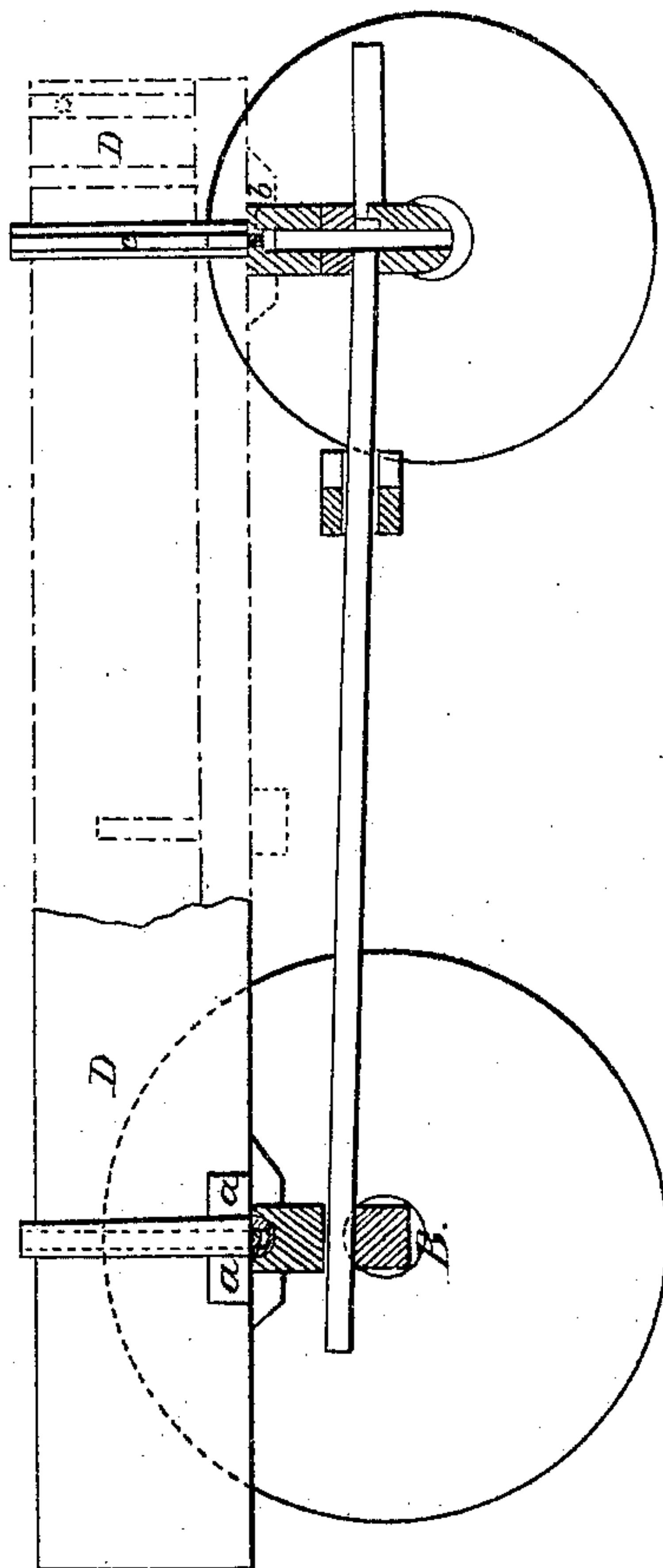
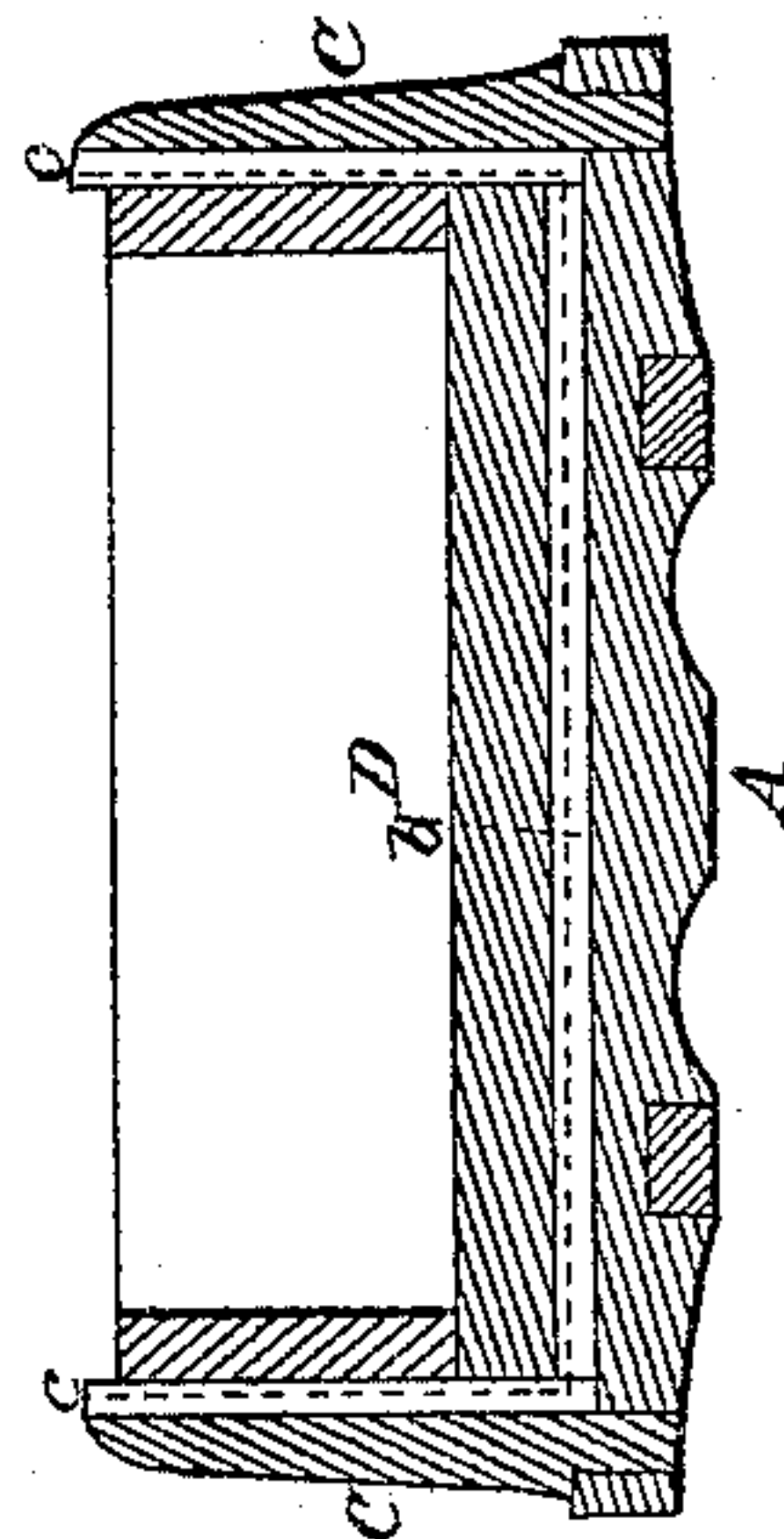
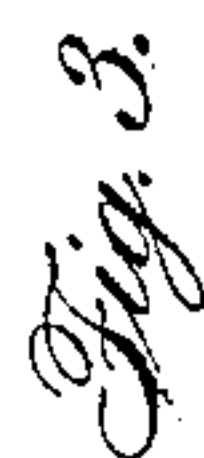


## Running-Gear.

Patented Apr. 2, 1867.



R. J. Campbell  
Edw. Schaffer

H. S. Horwance  
by  
Mason, Fenwick + Lawrence

# United States Patent Office.

HENRY S. HEERMANCE, OF CLAVERACK, NEW YORK.

*Letters Patent No. 63,516, dated April 2, 1867.*

## IMPROVEMENT IN WAGONS.

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, HENRY S. HEERMANCE, of Claverack, in the the county of Columbia, and State of New York, have invented an Improvement in Wagons; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a top view of the running-gear of a wagon having my invention applied to it.

Figure 2 is a vertical sectional view of the wagon.

Figure 3 is a transverse section, taken in a vertical plane through the wagon body, side-bars, and bolsters. Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement which is applicable to all kinds of wagons which are designed for carrying heavy loads, and particularly to such as do not have their bodies mounted upon springs.

The nature of my invention consists in applying to the bolsters and standards of the running-gear of a wagon India-rubber strips or tubes, in such manner that these strips will be securely held in their places, and form elastic supports and side abutments for the wagon body, and prevent rattling and wearing of the latter, and make it more comfortable to ride in, especially so if the body is not mounted upon springs, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings I have represented my invention applied to a wagon of the well-known form without springs. A A are the transverse cross-bars or bolsters, which are applied upon the axle-trees B B; and C C are the standards, which are secured upon the parts A A, at or near the ends thereof, for receiving between them the wagon body D. On the bolsters A the wagon body is supported, and kept in place by means of the standards C and cleats a a, which are applied to the sides of the body on both sides of each standard. In the upper surfaces of the cross-bars or bolsters A I form deep grooves, extending from one standard to another; and in the inner faces of the standards C C I also form grooves, extending from their bases to their upper ends, as shown in fig. 3. Into said grooves I confine strips or tubes of India rubber, b c, which project sufficiently far from their respective bars to afford elastic supports and abutments for the wagon body, as shown in the drawings, preventing, under all ordinary circumstances, the wagon body from striking the bars with a sudden shock. These elastic supports not only prevent unpleasant shocks and jars, but they also prevent the rocking of the wagon body, and the rapid wearing away of those parts of it which are exposed to the bolsters and standards.

I am aware that blocks of India rubber have been applied to springs under a wagon body for the purpose of supporting such body when it is so heavily loaded as to compress the springs considerably, and therefore I do not claim this application of rubber. By my invention the wagon body is supported at all times upon the India-rubber springs applied directly to the bottom and sides thereof.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The application of India rubber between a wagon body and the cross-bars or bolsters upon which it rests, substantially as and for the purposes described.
2. The application of India rubber between the standards C C and a wagon body, substantially as and for the purposes described.

HENRY S. HEERMANCE.

Witnesses:

E. G. STUDLEY,

A. ROOT.