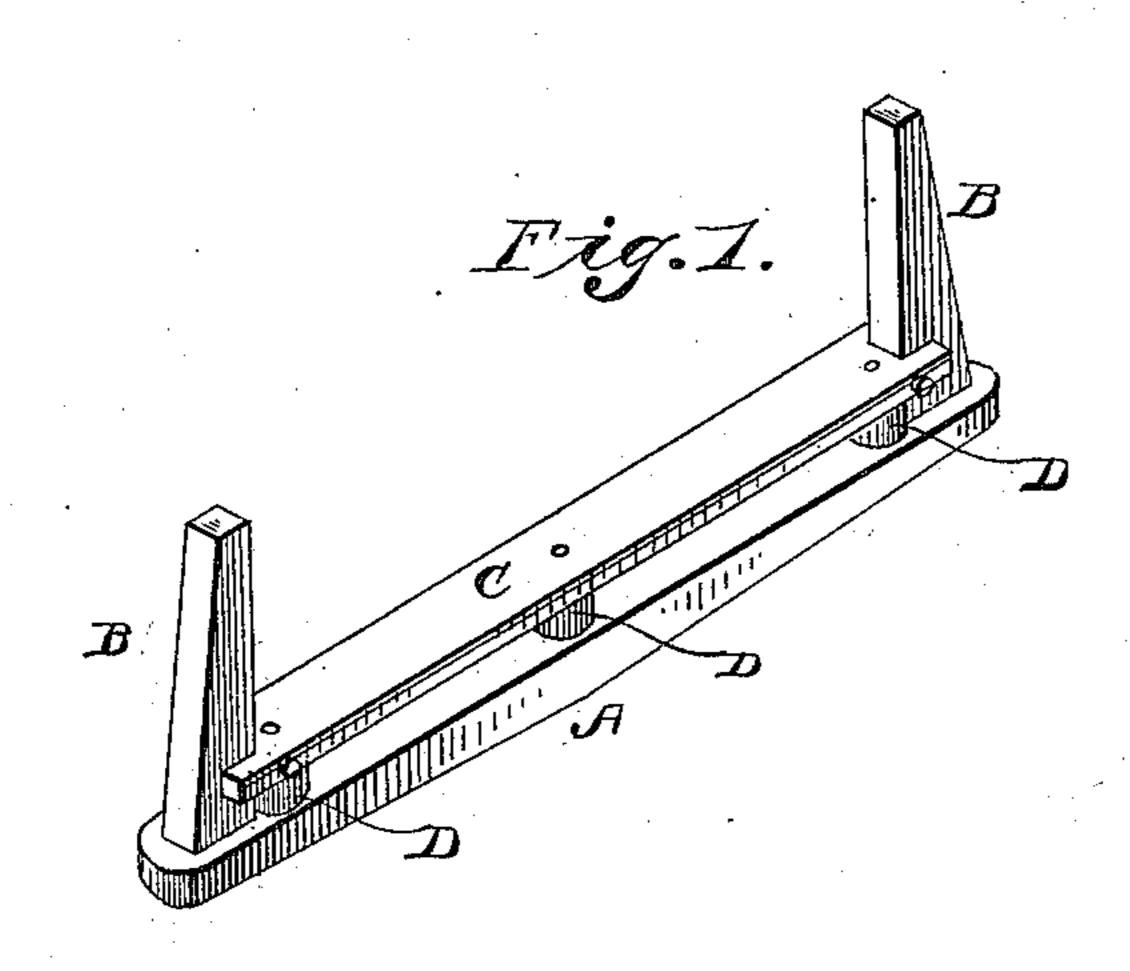
(No Model.)

Z. A. BENELL.

WAGON BOLSTER.

No. 309,286.

Patented Dec. 16, 1884.



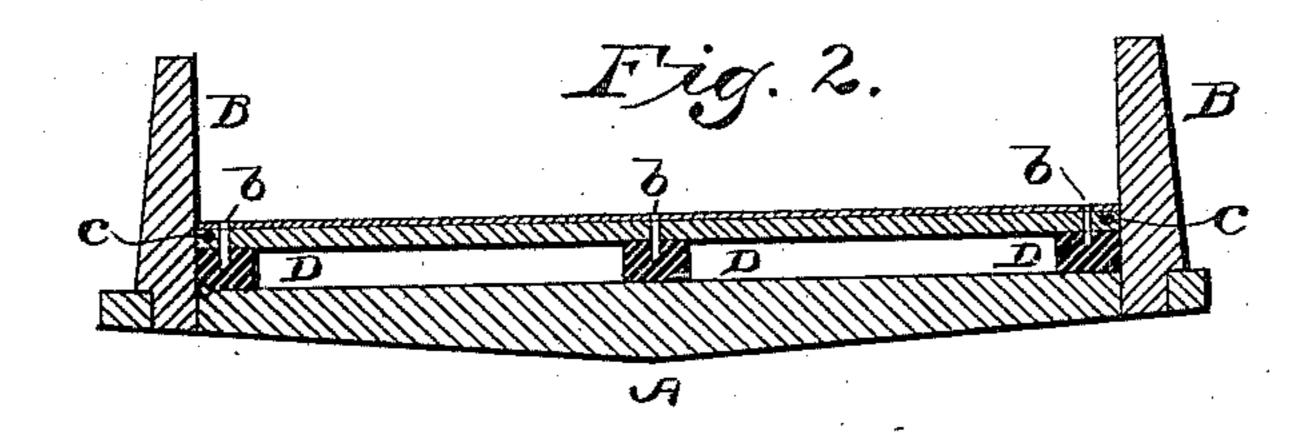
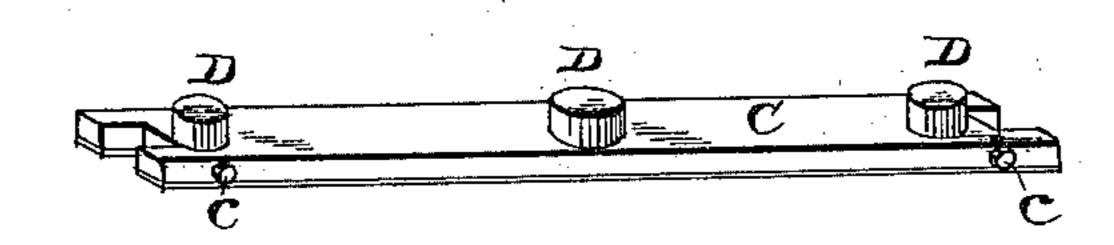


Fig. 3.



WITNESSES

Ottimer.

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## United States Patent Office.

## ZACHARIAH A. BENELL, OF FREDONIA, KANSAS.

## WAGON-BOLSTER.

## SPECIFICATION forming part of Letters Patent No. 309,286, dated December 16, 1884.

Application filed September 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, Zachariah A. Benell, a citizen of the United States, residing at Fredonia, in the county of Wilson and State of Kansas, have invented a new and useful Improvement in Bolsters, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to wagons, and more particularly to the class known as "farmwagons;" and it has for its object to provide the bolster of the same with a new and improved spring of cheap, simple, and durable construction, and one that may be readily detached when so desired or found necessary.

With these ends in view the invention consists, primarily, in the combination, with a wagon-bolster and the standards or uprights thereof, of a sliding plate or bar and elastic cushions or springs interposed between said sliding plate and the bolster.

The invention further consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a wagon-bolster detached, showing my improved spring applied thereto. Fig. 2 is a longitudinal vertical section of the same, 30 and Fig. 3 is a detail view, in perspective, of the bolster-spring detached.

In the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, A represents the bolster, which is provided at its ends with the usual uprights or standards, B, which are mortised in said bolster or secured thereto in any other suitable manner.

C represents a plate or bar, which is prefto erably of wood. The ends of this plate or
bar are recessed or cut away, as shown, to fit
upon the uprights or standards of the bolster, and they are adapted to slide thereon.
Upon the upper side of this plate or bar is
provided a strip or cushion of rubber or other
elastic material, said strip a being the same
width as the sliding plate or bar and extending the entire length of the same. It will
thus be seen that all wear upon the sliding
plate or bar caused by the jolting and jarring of the wagon-body will be obviated. It
will also be seen that when said strip of rubber becomes worn so as to be unfit for use

it may be detached and substituted by another at a slight cost.

D represents a series of rubber cushions or springs, secured to the under side of the sliding plate or bar in any suitable manner, said springs resting at their lower ends upon the upper side of the bolster. There may be as 60 many of the rubber springs or cushions as may be desired or found necessary; but the number preferably employed is three, which have been found to be thoroughly efficient. The said springs or cushions D are secured 65 and held in place upon the under side of the sliding plate by means of wooden or other pins, b, which pass through the sliding plate or bar and enter the said cushions a sufficient distance to hold the same.

It will be seen that a spring constructed as above described may be manufactured and supplied at a slight cost, and that it is simple and durable, and, further, that it may be readily removed from the bolster for any pur- 75 pose whatever.

I have found it desirable, in order to prevent the splitting of the sliding plate or bar, to tie the notched ends of the same together by rivets, as shown at c, thus preventing any 80 possibility of the said plate becoming cracked or broken.

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

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1. The combination, with a bolster and the uprights or standards thereof, of a plate having notched ends tied together by rivets, a series of rubber cushions, and a strip of rubber secured upon the upper side of said plate, 90 as set forth.

2. The combination, with a bolster and the uprights or standards thereof, of a plate having notched ends tied together by rivets, a rubber, strip on the upper side of said plate, 95 and rubber cushions secured upon the under side of the plate by pins passing through the sliding plate and partly through the rubber cushions, substantially as set forth.

In testimony that I claim the foregoing as 100 my own I have hereto affixed my signature in presence of two witnesses.

ZACHARIAH A. BENELL.

Witnesses:

THOMAS J. HUDSON, W. M. VESTAL.