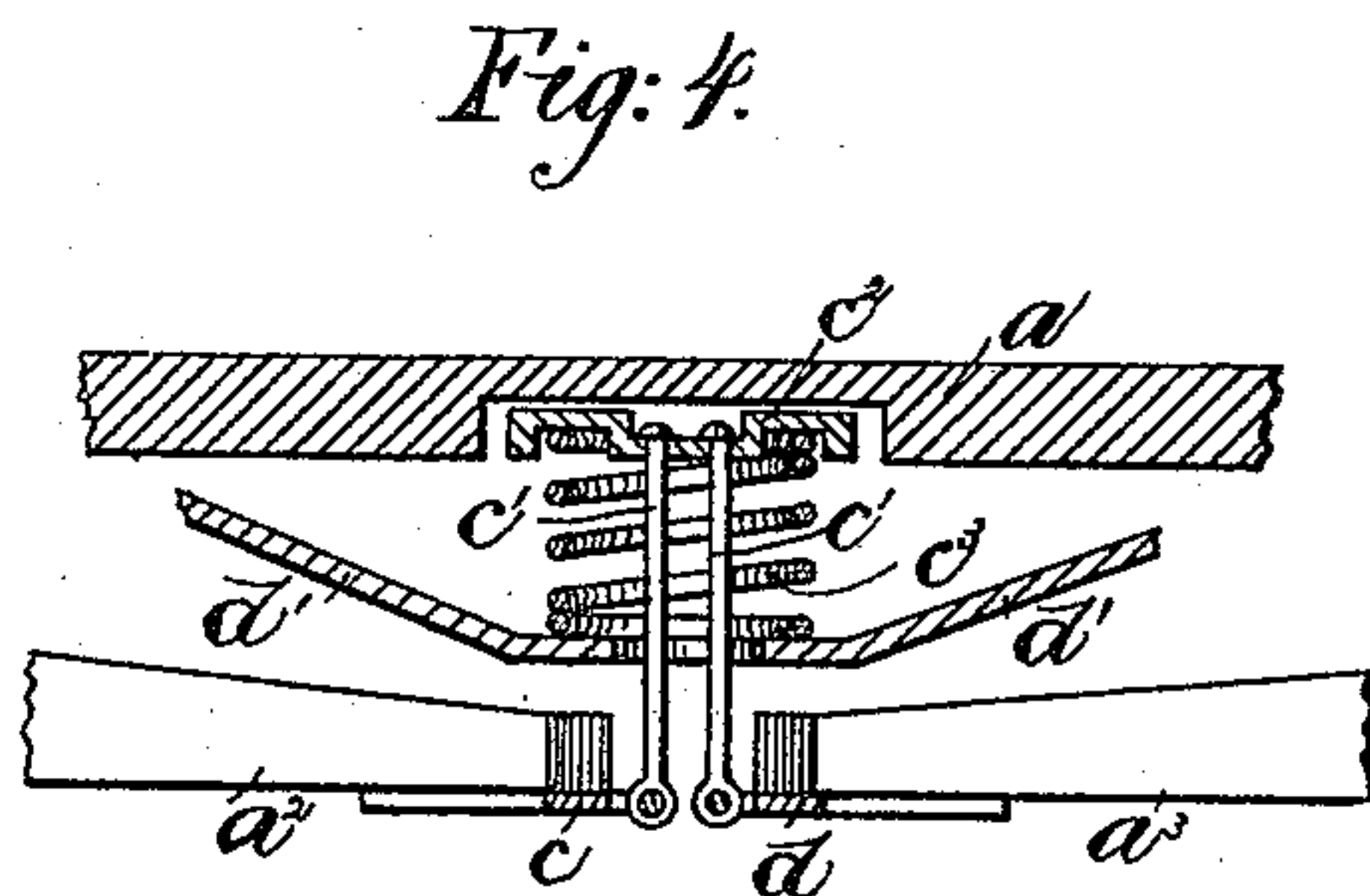
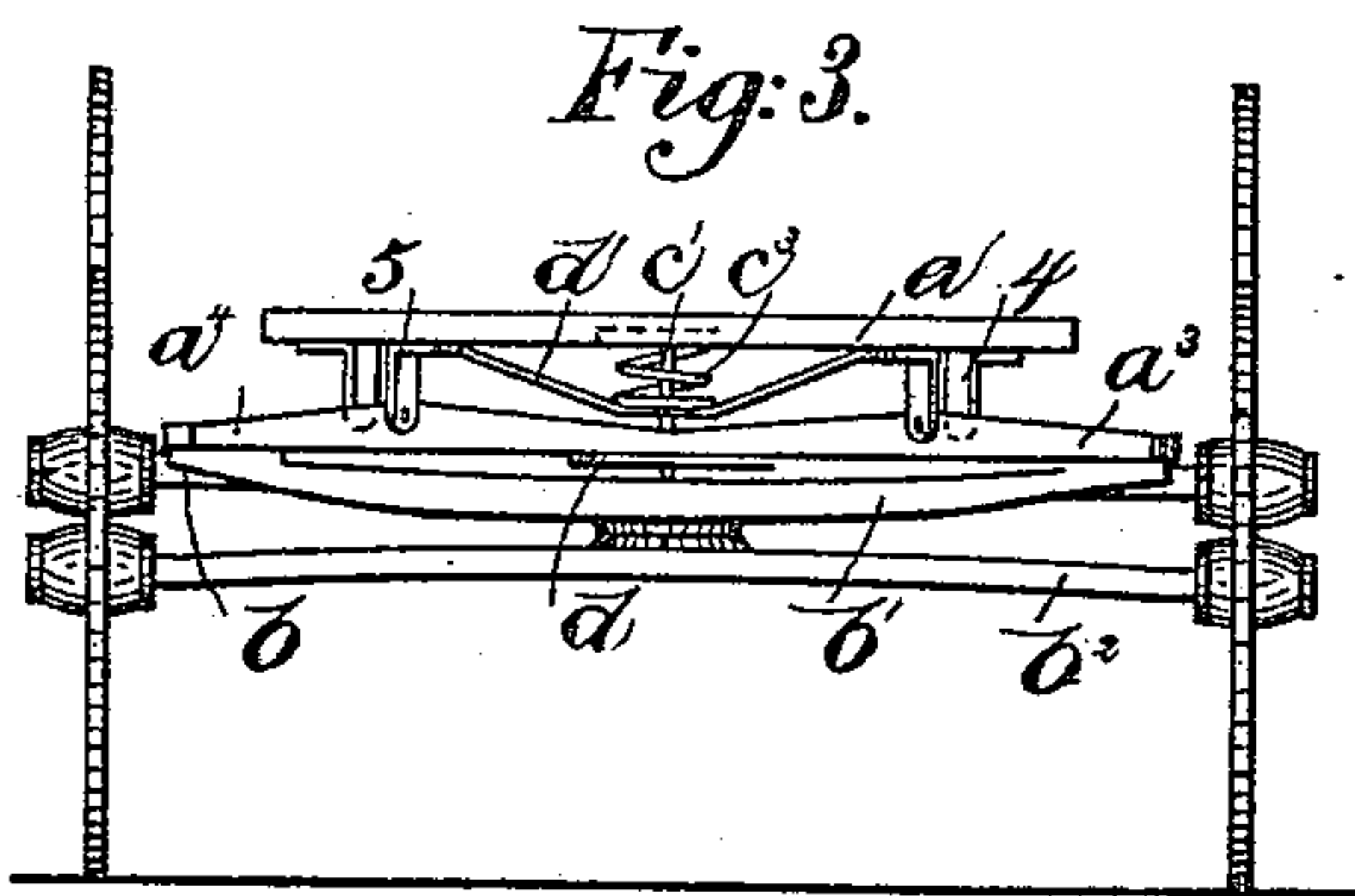
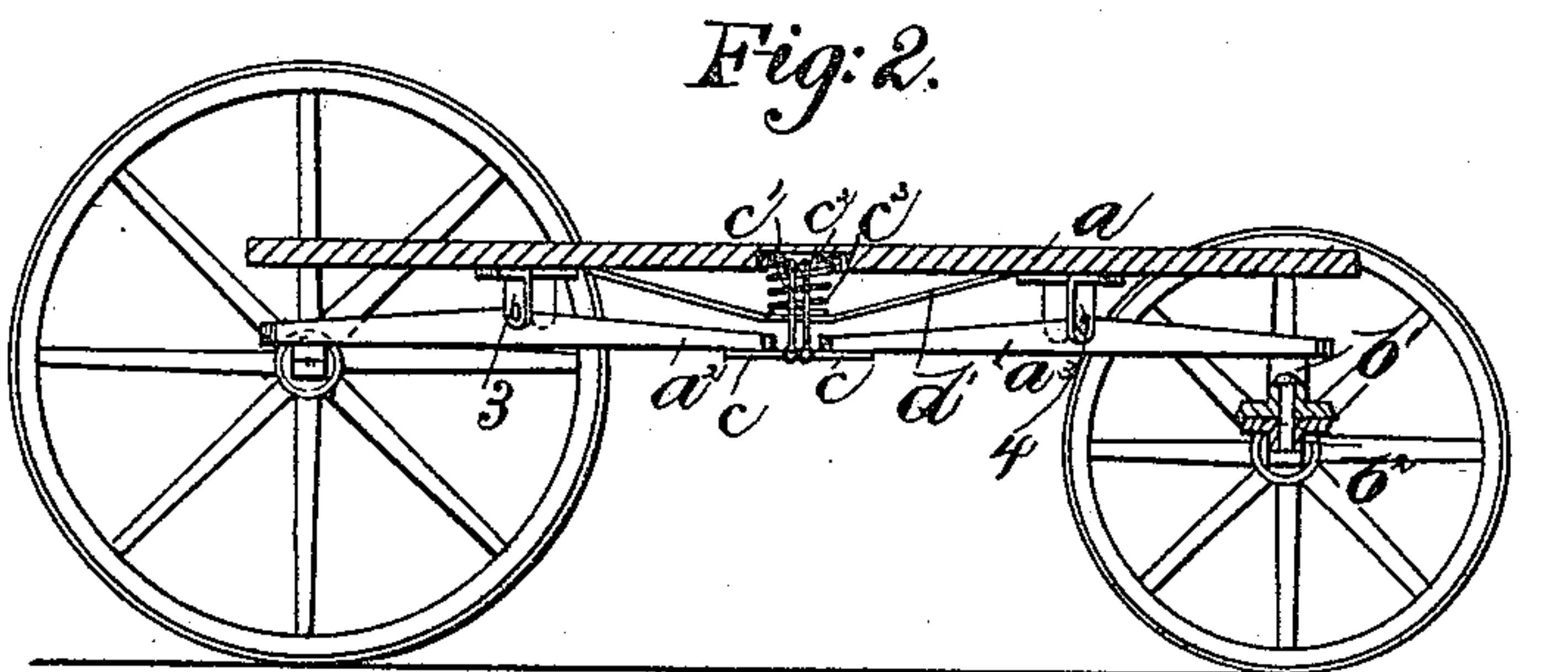
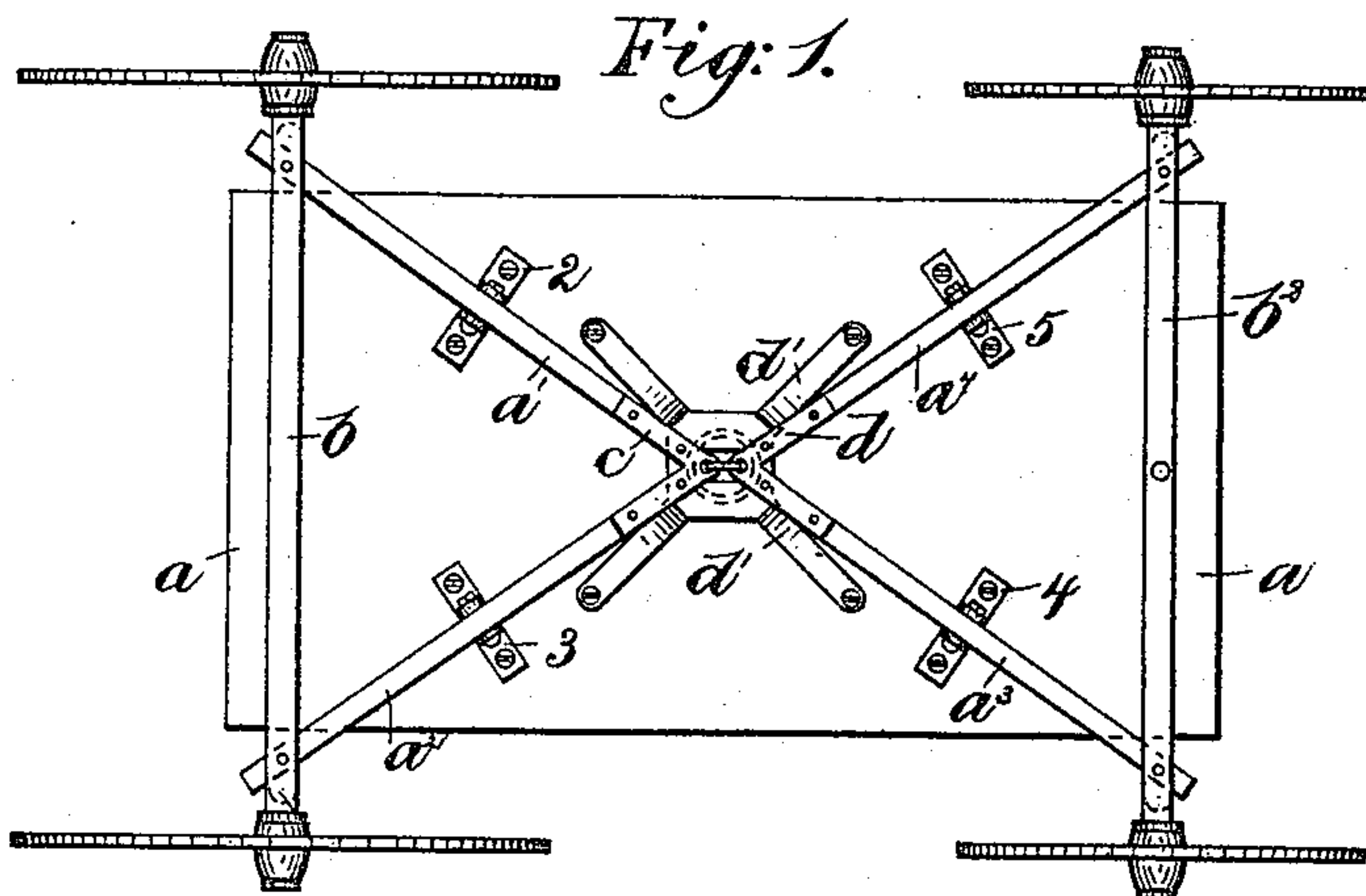


(No Model.)

A. CONNER.  
VEHICLE SPRING.

No. 441,400.

Patented Nov. 25, 1890.



WITNESSES:  
*Geo. C. Huntington*  
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*attys*

# UNITED STATES PATENT OFFICE.

ALFRED CONNER, OF EXETER, NEW HAMPSHIRE.

## VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 441,400, dated November 25, 1890.

Application filed August 23, 1890. Serial No. 362,843. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED CONNER, of Exeter, county of Rockingham, State of New Hampshire, have invented an Improvement in Vehicle-Springs, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention is an improvement on the vehicle-spring shown and described in United States Patent No. 245,451, granted to me August 9, 1881; and my invention consists in details of construction to be hereinafter pointed out in the claims at the end of the specification.

Figure 1 shows in under side view a vehicle-spring embodying this invention, in connection with a wagon-body and platform, a wagon-axle, and wheels; Fig. 2, a longitudinal section of the parts shown in Fig. 1; Fig. 3, an end view, and Fig. 4 an enlarged sectional detail to be referred to.

The platform *a* has attached to its under side four brackets 2, 3, 4, and 5, to which are respectively pivoted obliquely-arranged levers *a'* *a*<sup>2</sup> *a*<sup>3</sup> *a*<sup>4</sup>. The levers *a'* *a*<sup>2</sup> are connected at their outer ends to and support the axle *b*, and the levers *a*<sup>3</sup> *a*<sup>4</sup> are connected at their outer ends to a supporting-bar *b'*, mounted on the axle *b*<sup>2</sup>. The pair of levers *a'* *a*<sup>2</sup> are joined together at their opposite ends by a plate *c*, and the pair of levers *a*<sup>3</sup> *a*<sup>4</sup> are joined together at their opposite ends by a plate *d*. The plates *c* *d* have each attached to them a link, as *c'*, having a head, which links pass through and are supported by a plate *c*<sup>2</sup>, in turn supported by a strong spiral spring *c*<sup>3</sup>, bearing on a bot-

tom plate *d'*, secured to the under side of the platform *a*.

When suitable weight is placed on the platform, the spring *c*<sup>3</sup> yields and the two pairs of levers are turned on their pivots, and the outer ends of said levers being connected directly or indirectly with the axles there is no limit to their movement until the platform strikes the outer ends of the levers.

I claim—

1. The platform *a* and the spring *c*<sup>3</sup> and its supporting-plate *d'*, attached to the under side of the platform, combined with the levers *a'* *a*<sup>2</sup> *a*<sup>3</sup> *a*<sup>4</sup>, pivoted to the platform between their ends, and the axles to which the outer ends of said levers are connected, the inner ends of said levers being connected to the said spring to thereby directly connect the platform and axles, substantially as described.

2. The platform *a*, spring *c*<sup>3</sup>, and its supporting-plate *d'*, secured to the under side of the platform, combined with the pivoted levers *a'* *a*<sup>2</sup>, connecting-plate *c*, the pivoted levers *a*<sup>3</sup> *a*<sup>4</sup>, the connecting-plate *d*, and the axles to which the outer ends of each pair of said levers are respectively connected, the rigidly-connected inner ends thereof being connected to the spring *c*<sup>3</sup>, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED CONNER.

Witnesses:

CHARLES H. SEAVEY,  
WILLIAM H. BELKNAP,