

(No Model.)

2 Sheets—Sheet 1.

P. J. BERDOHL.

WAGON SPRING.

No. 286,377.

Patented Oct. 9, 1883.

Fig. 1.

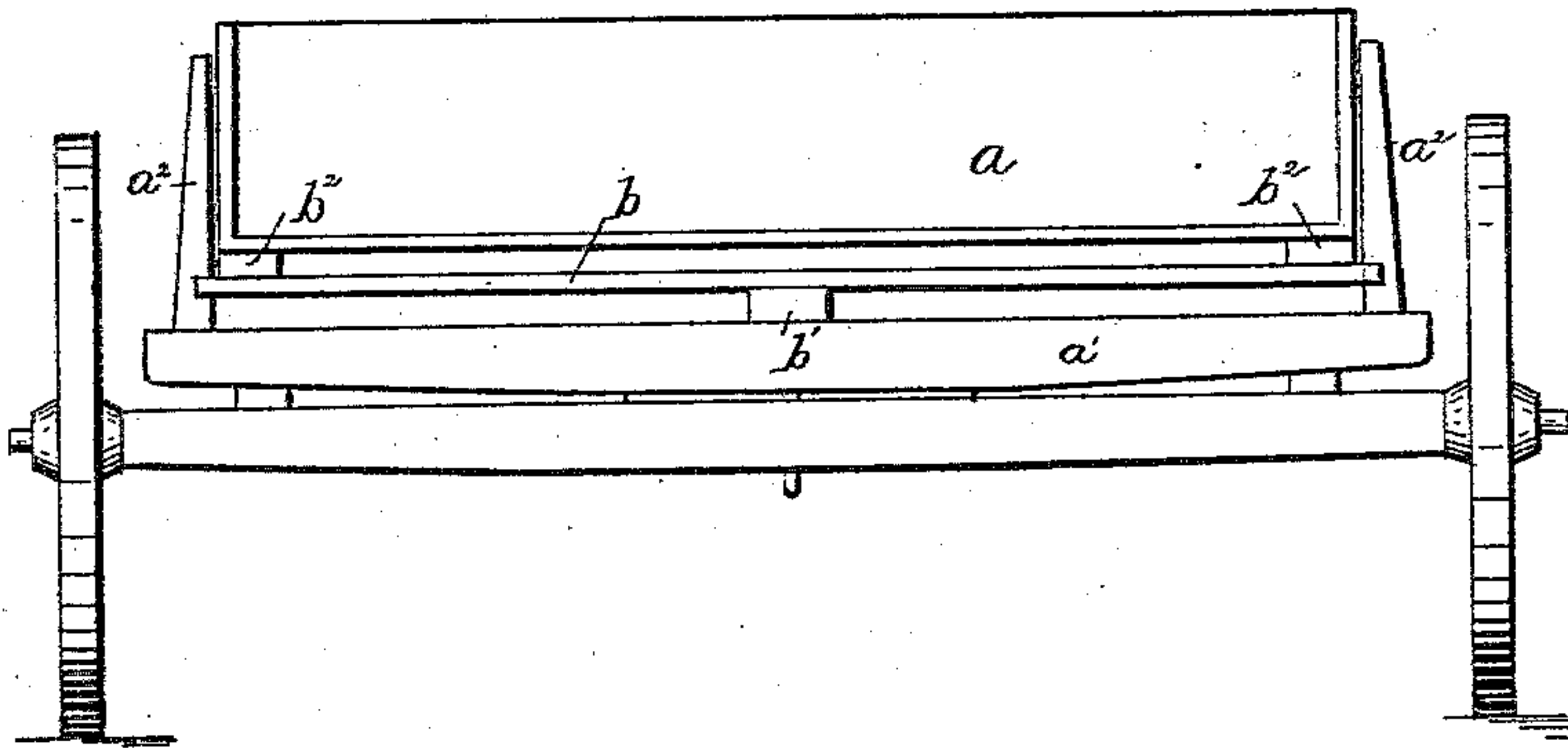


Fig. 2.

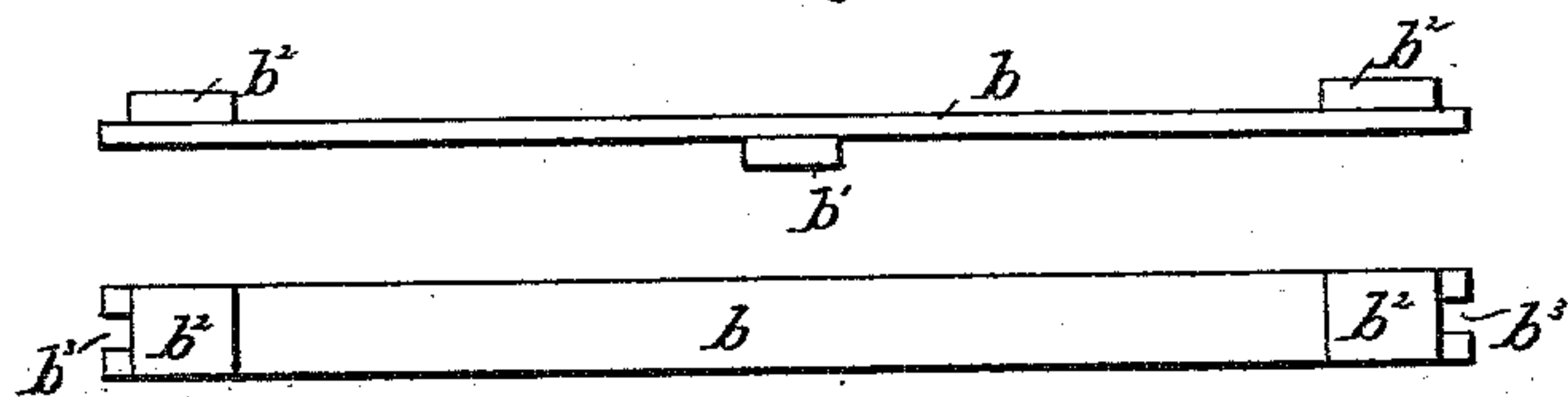


Fig. 3.

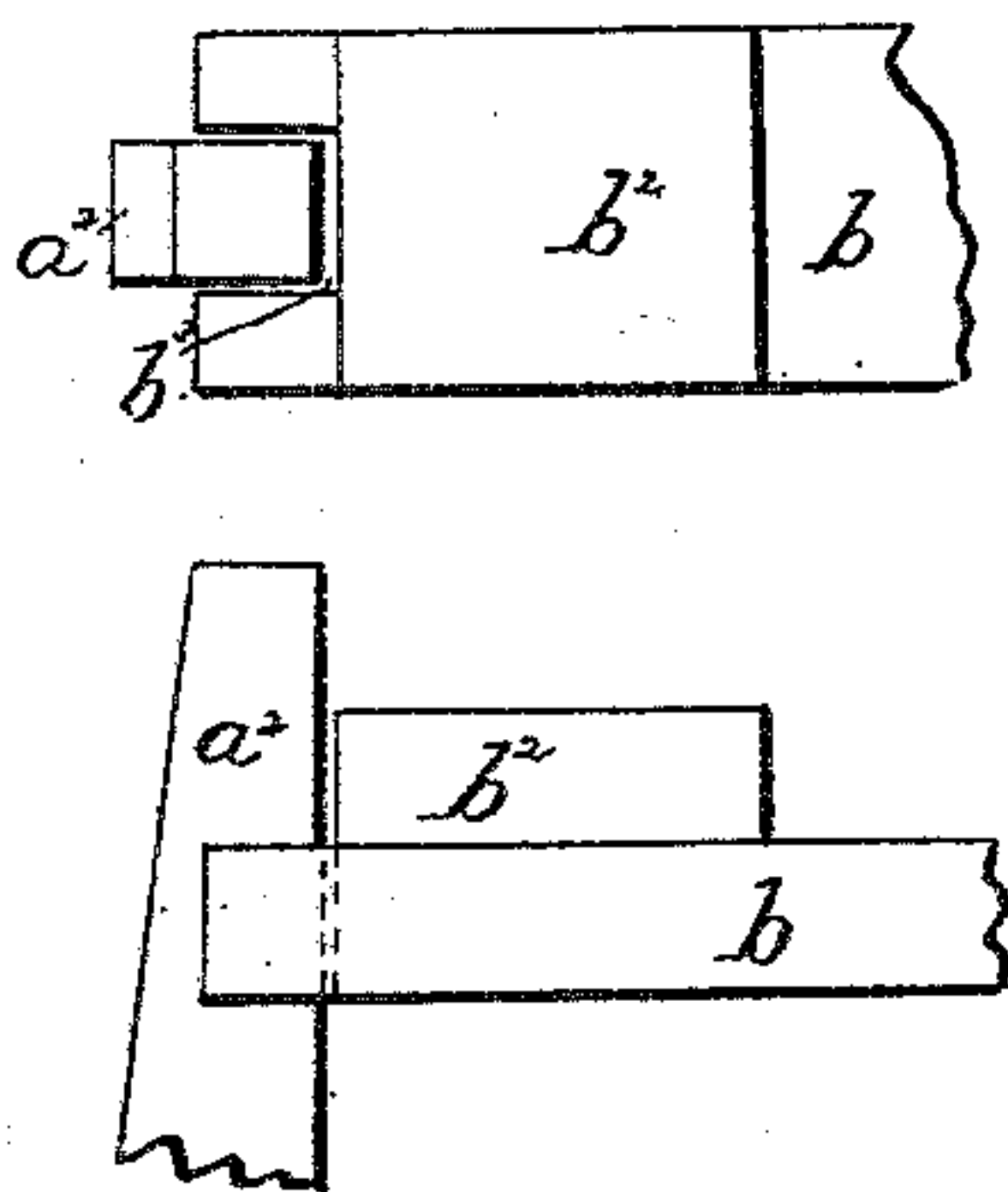
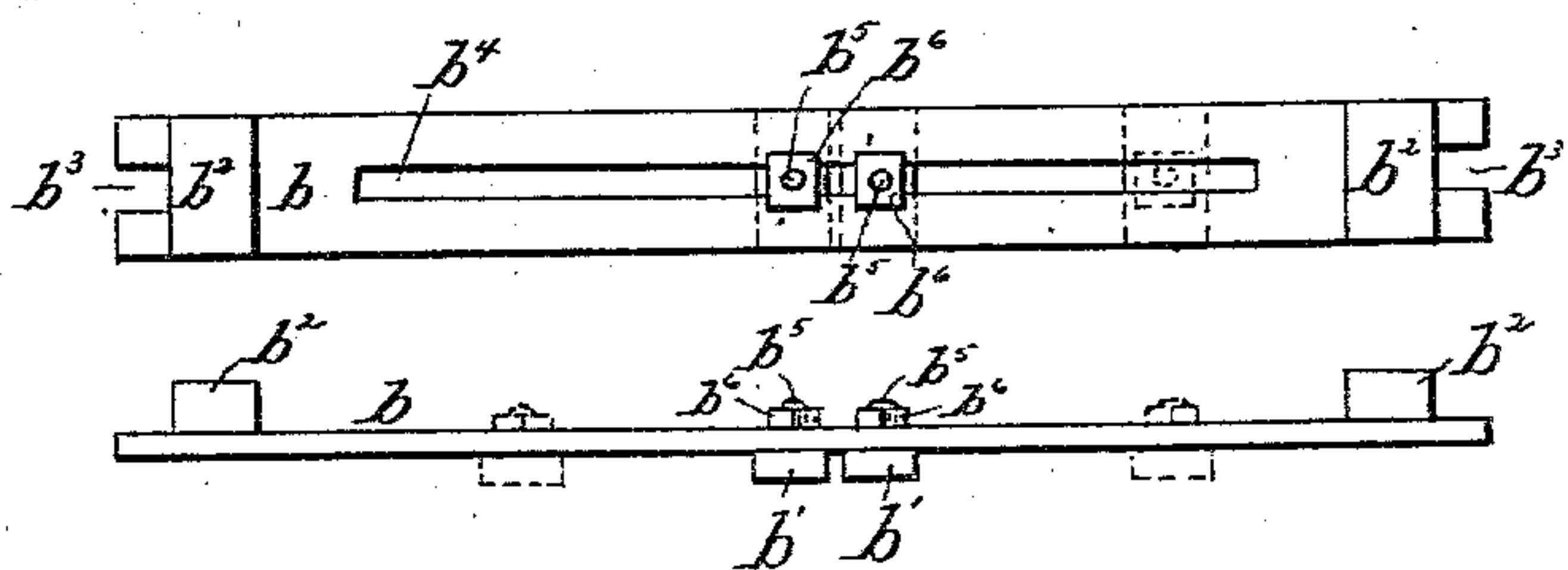


Fig. 4.



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(No Model.)

2 Sheets—Sheet 2.

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WAGON SPRING.

No. 286,377.

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Fig. 5.

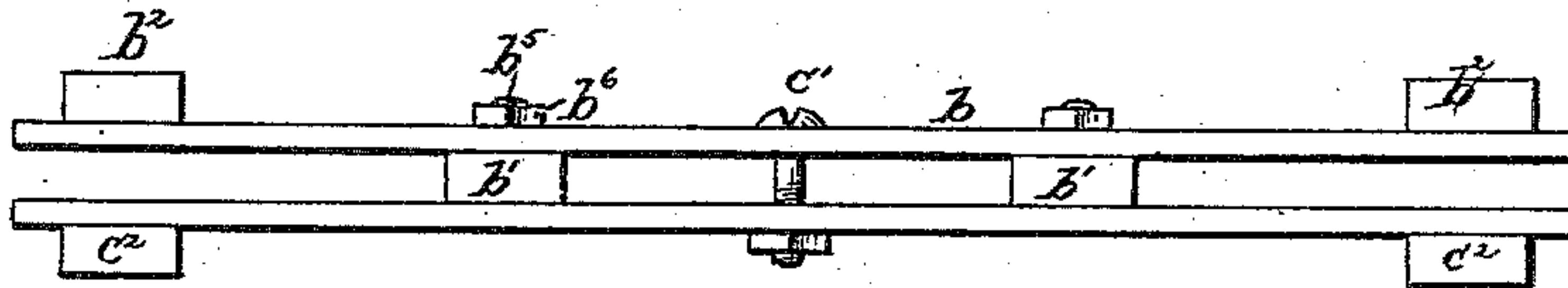


Fig. 6.

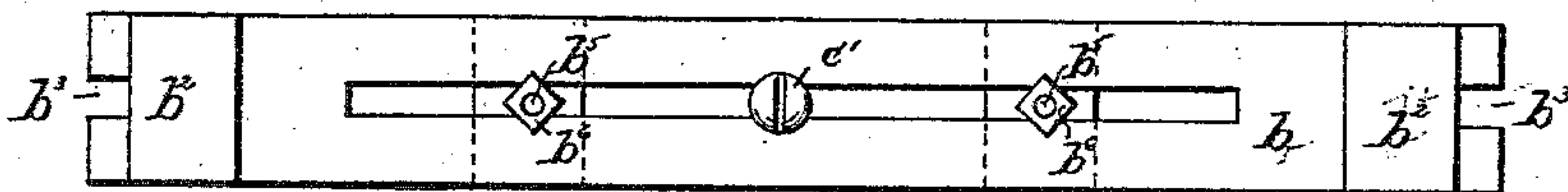


Fig. 7.

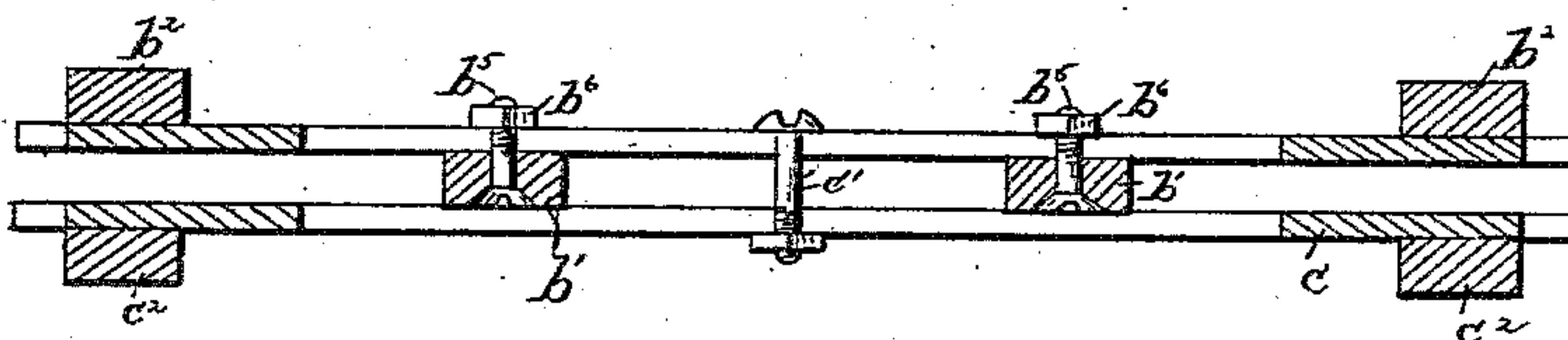
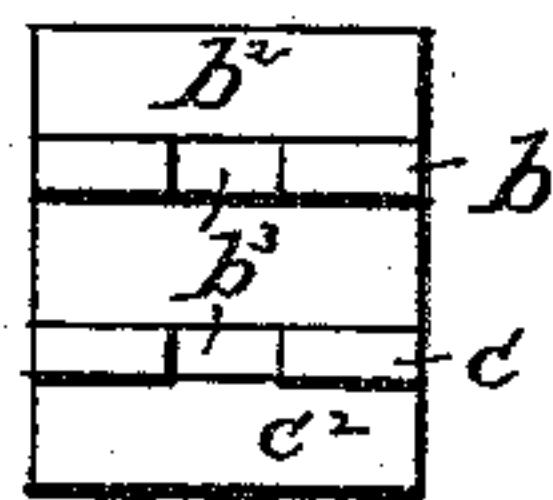


Fig. 8.



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UNITED STATES PATENT OFFICE.

PETER J. BERDOHL, OF DELL RAPIDS, DAKOTA TERRITORY.

WAGON-SPRING.

SPECIFICATION forming part of Letters Patent No. 286,377, dated October 9, 1883.

Application filed February 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, PETER J. BERDOHL, a citizen of the United States, residing at Dell Rapids, in the county of Minnehaha and Dakota Territory, have invented certain new and useful Improvements in Wagon-Springs, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to springs for vehicles; and it consists in the construction, combination, and arrangement of the several parts, as will be described, and pointed out in the claims.

In the drawings, Figure 1 is an end view of a wagon provided with my improved spring. Figs. 2, 3, and 4 show in detail springs made of a single spring-bar, and Figs. 5, 6, 7, and 8 show springs made of two spring-bars, as will be more fully described.

The object of my invention is to provide a cheap spring, and one that can be readily made and applied by a farmer or other persons, and will not need the aid of a mechanic.

In Fig. 1 I have shown my spring on a wagon.

a designates the wagon-body, a' the bolster, and a^2 a^3 side bars projected upward from the ends of the bolster.

b is the spring-bar, secured on block b' , fixed on its under sides midway its length, and rested on the bolster, as shown. b^2 are bolts fixed on the upper side of the bar b , near its ends, and providing rests for the body a .

b^3 are slots formed in the ends of the bar b and sliding over the bars a^2 , whereby the spring is held in position. It will be understood it might be secured on the running-gear by bolts or otherwise; but I prefer the construction shown, as it is simple and convenient.

It is sometimes advantageous to use two or more blocks, b' , and secure them to the spring-bar in such manner that they may be adjusted to and away from the middle of the bar, so that the length of bar free to spring will be increased or decreased as the load is light or heavy. In order to do this I cut the opening b^4 through the bar b and secure the block b' to the bar b by bolts b^5 , passed through the

opening b^4 , and nuts b^6 , so that the blocks b' can be held near the middle of the bar, as shown in full, or nearer its ends, as indicated in dotted, lines, Fig. 4.

Where it is desired to have more spring than can be obtained by the single bar b , I employ the lower spring-bar, c , constructed with end slots, b^3 , like the bar b , and secured centrally to the said bar by the bolt c' , as shown in Figs. 5, 6, 7, and 8.

c^2 are blocks secured on the under side of the bar c , directly under the blocks b^3 , and adapted to rest on the bolster or other portion of the running-gear on which the spring is placed.

By this construction a simple, cheap, and durable spring is furnished.

By placing these springs on a lumber or other rough wagon and placing the body on the springs, the wagon is converted at once into an easy-riding spring-vehicle with but little trouble, and with as little trouble the wagon can be changed from spring to rough for heavy hauling.

I intend to make my springs of wood of suitable varieties, and it is designed with special reference to the use of that material. It will be understood, however, that metal could be employed where it is desirable to do so.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The vehicle-spring, substantially as described and shown, consisting of the bars b and c , secured together by means of the bolt c' , and formed with end slots, b^3 , and a longitudinal slot, b^4 , said bars being separated and their tension regulated by means of the blocks b' , substantially as set forth.

2. In a vehicle-spring, the spring-bar provided with the blocks b^2 , and constructed with the opening b^4 , and the blocks b' , secured to the said bar by bolts b^5 , passed through the opening b^4 and nuts b^6 , whereby the said blocks b' may be adjusted to or away from the middle of said spring-bar, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

PETER J. BERDOHL.

Witnesses:

HENRY COBB,
O. H. SMITH.