

W. KOTZUM.  
Car-Bumper Spring.

No. 92,062.

Patented June 29, 1869.

Fig. 1

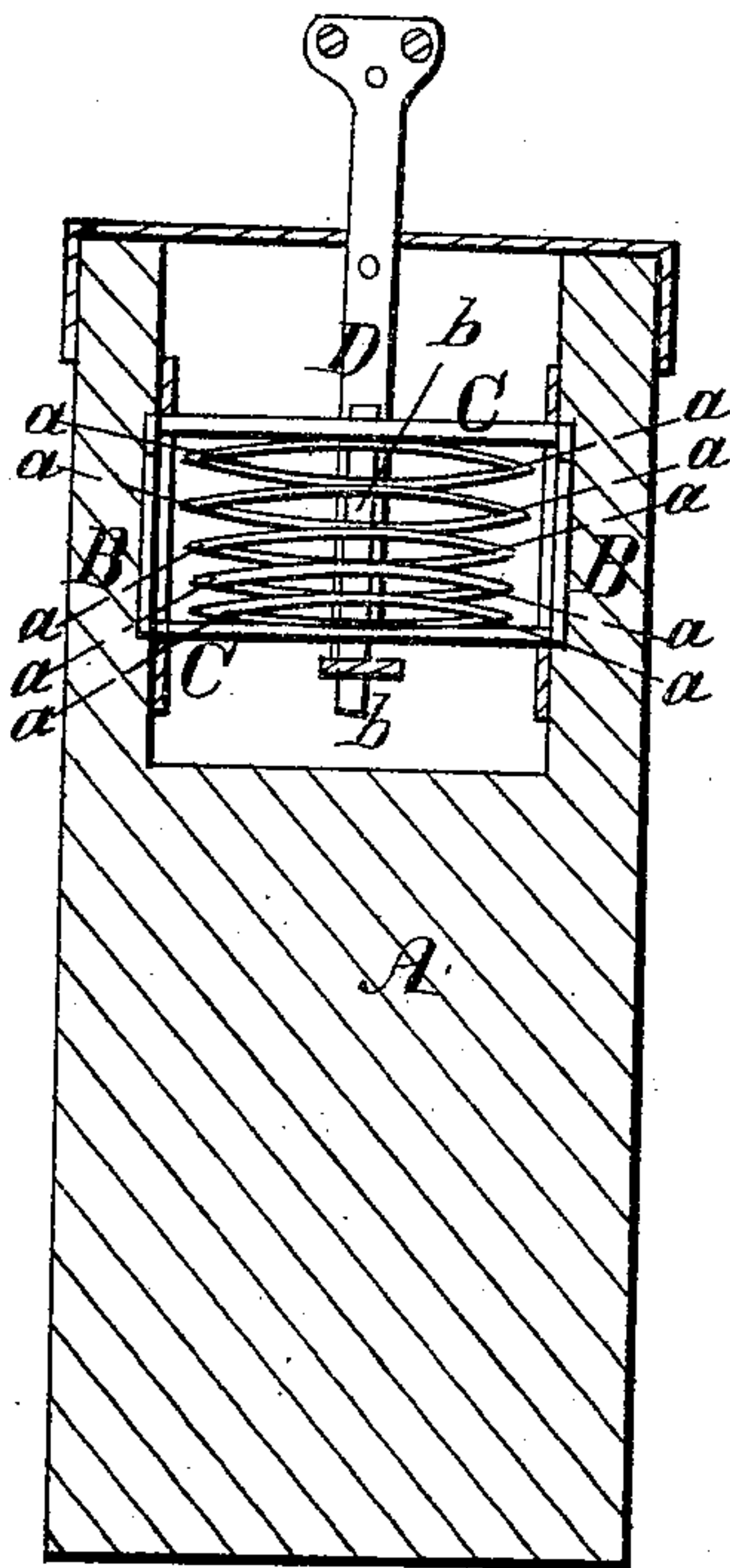
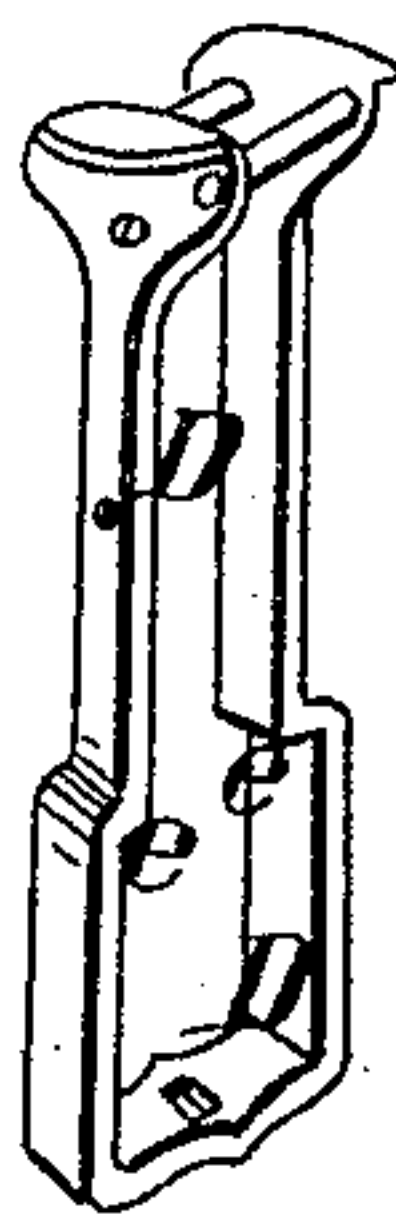


Fig. 2



Witnesses;  
Cordell Cox  
Leopold Grieb

Inventor;  
Wenzel Kotzum  
per Alexander Mason  
Attys.

# United States Patent Office.

WENZEL KOTZUM, OF AURORA, INDIANA.

Letters Patent No. 92,062, dated June 29, 1869.

## IMPROVED DRAW-BAR.

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, WENZEL KOTZUM, of Aurora, in the county of Dearborn, and in the State of Indiana, have invented a certain new and useful Improved Draw-Bar Spring for Railroad-Cars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a "draw-bar spring" for railroad-cars, made of a series of leaf-springs, connected in a manner that will be hereinafter set forth.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a horizontal section of the draw-bar and spring; and

Figure 2 is a perspective of the draw-bar.

A represents that portion of a railroad-car to which the draw-bar generally is attached, said portion being cut open, or slotted in the centre, as seen in fig. 1, forming two jaws, B B. These jaws are slotted on their inner sides for a suitable distance, and in these slots the ends of two movable cross-bars, C C, are inserted.

Between the cross-bars C C is placed a series of leaf-springs, *a a*, which are held in proper position by a flat bolt, *b*, passing through the centre of said springs, and through the centre of the cross-bars C C, thus hold-

ing the springs in place, but at the same time allowing them to act freely.

The ends of the cross-bars C C are bent inward in the slots on the sides of the jaws B B, so that the said cross-bars cannot be drawn close together, but will, under all circumstances, leave room enough between them for the springs *a a*.

The draw-bar D, which embraces the cross-bars C C and springs *a a*, is provided with shoulders, *e e*, as seen in fig. 2, which rest on the outer side of the front cross-bar, while the centre of the draw-bar rests against the rear side of the inner cross-bar, the bolt *b* passing through this portion of the draw-bar.

It will thus be seen that my draw-bar spring is double-acting. For instance, when the bumpers are brought suddenly together, the shoulders *e e* of the draw-bar press the outer cross-bar inward; and when the cars are put in motion, the inner cross-bar is drawn outward, or forward, the leaf-springs *a a*, in both instances, yielding sufficient to relieve the cars from the sudden jar and concussion.

Having thus fully described my invention,

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

The combination of the draw-bar B, having shoulders *e e*, the cross-bars C C, springs *a a*, and flat bolt *b*, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 18th day of February, 1869.

Witnesses:

WENZEL KOTZUM.

MICHAEL SIEMANTEL,  
ADAM HERDEGEN.