

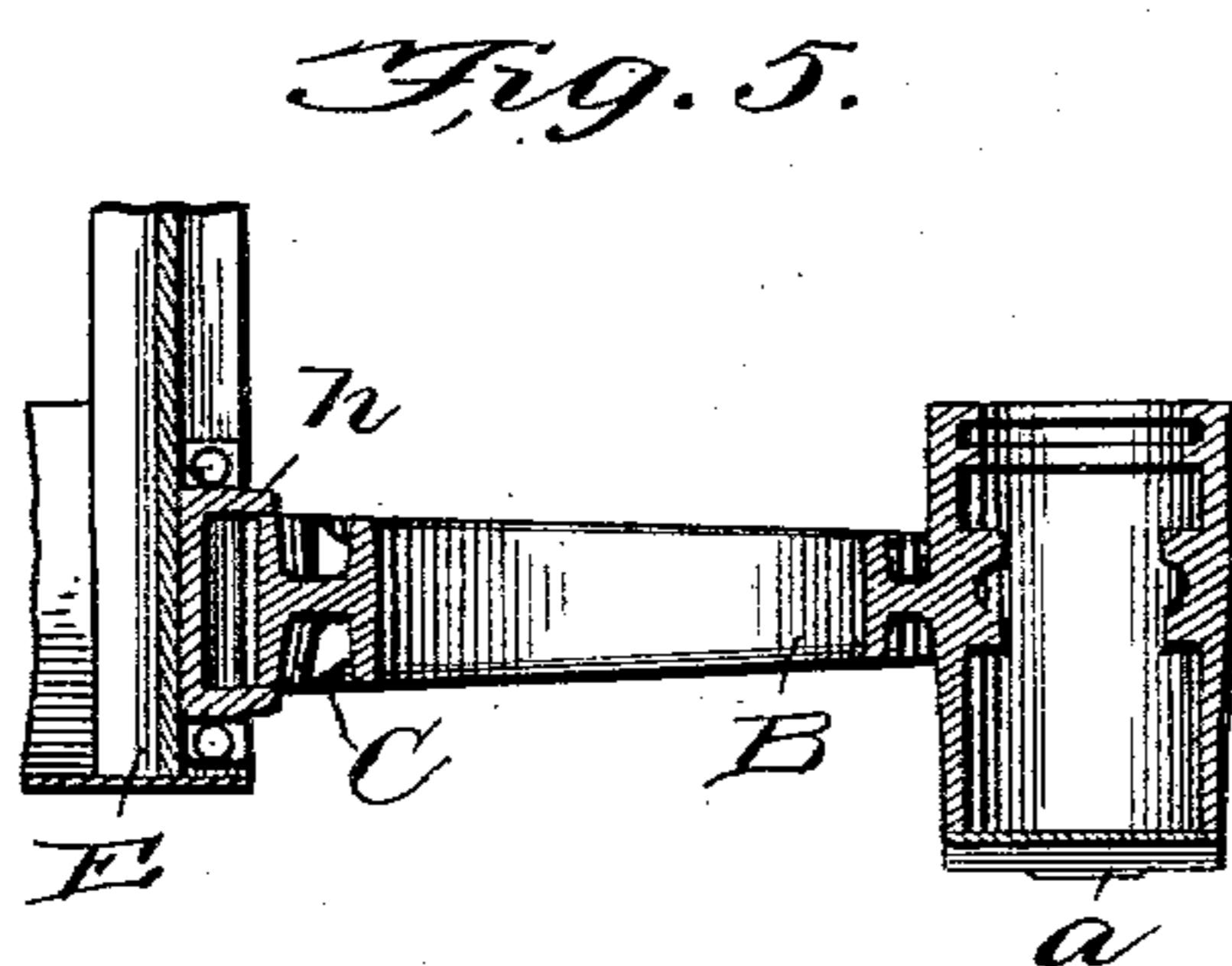
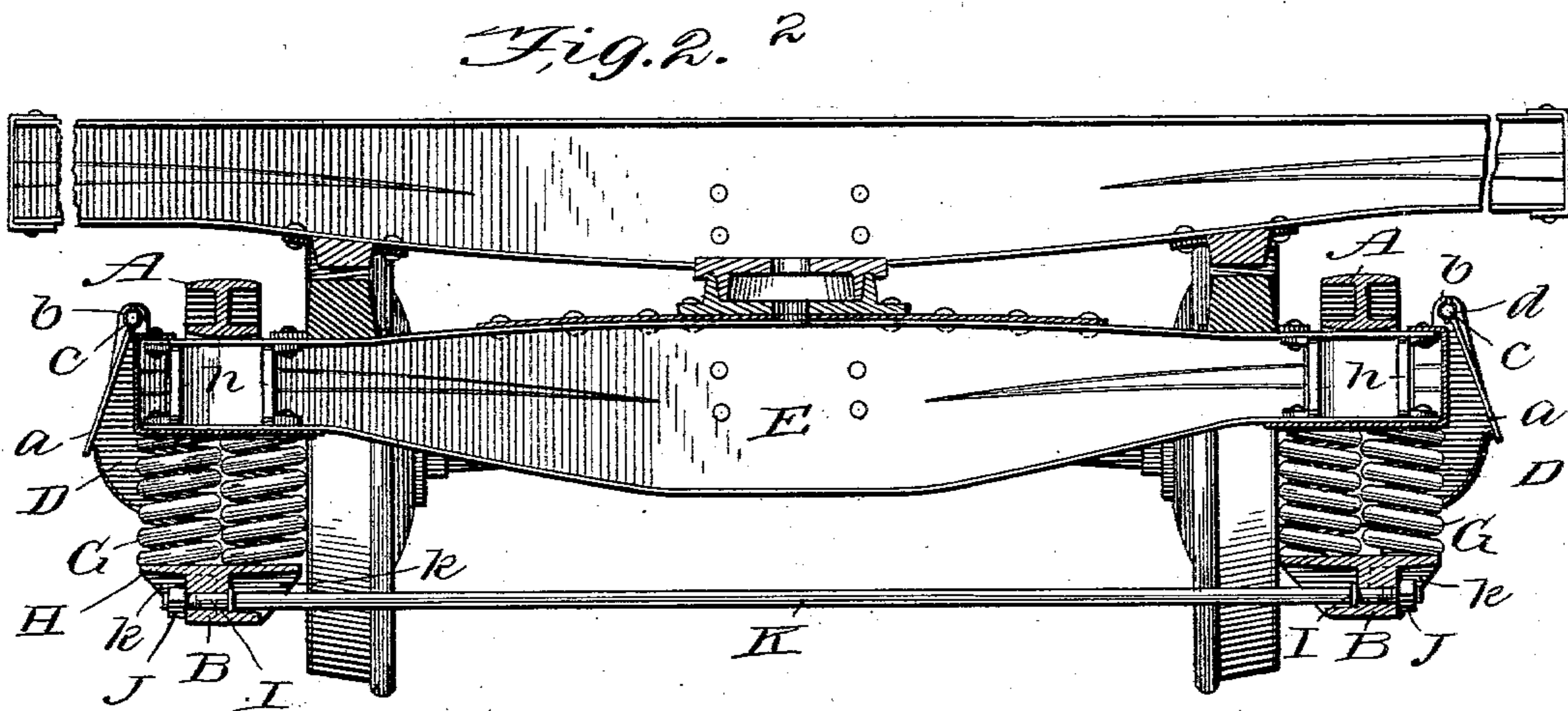
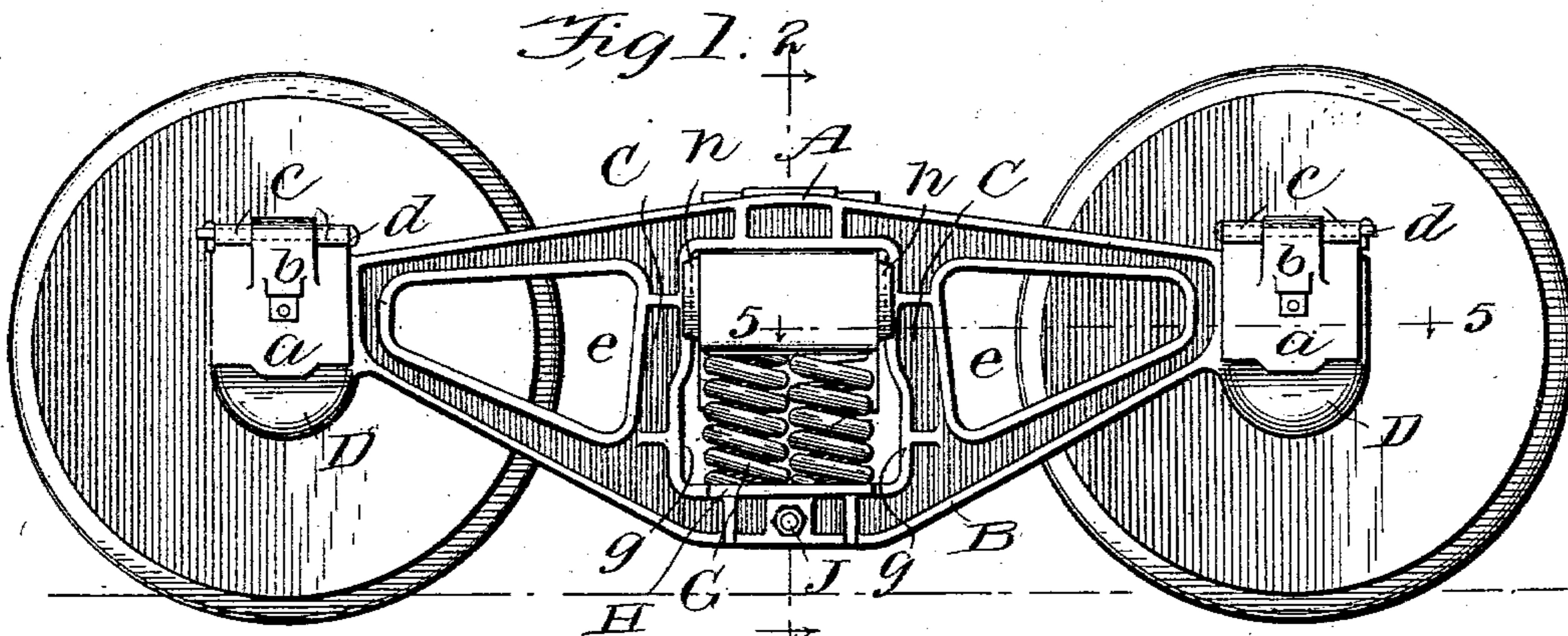
W. P. BETTENDORF.

CAR TRUCK.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

F. C. Baum.

E. K. Lundy

Inventor:

William P. Bettendorf.

by Frank D. Thompson  
attorney.

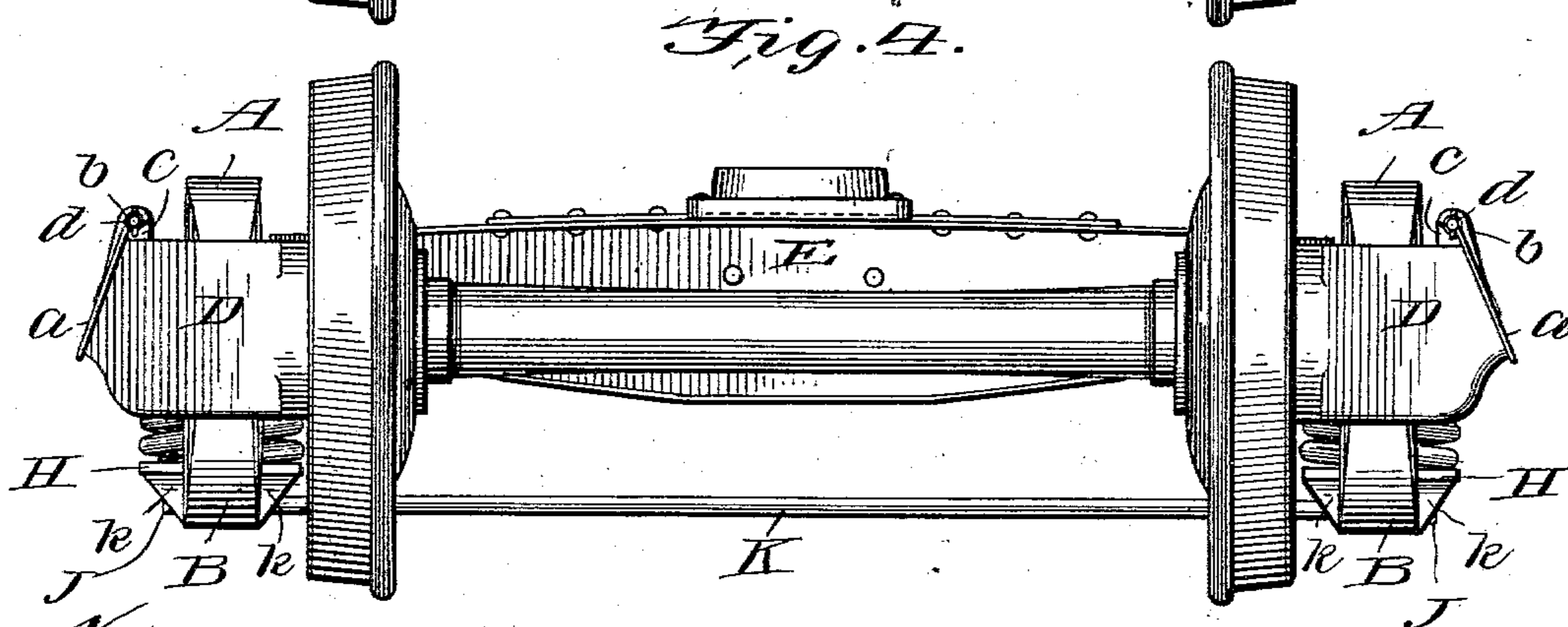
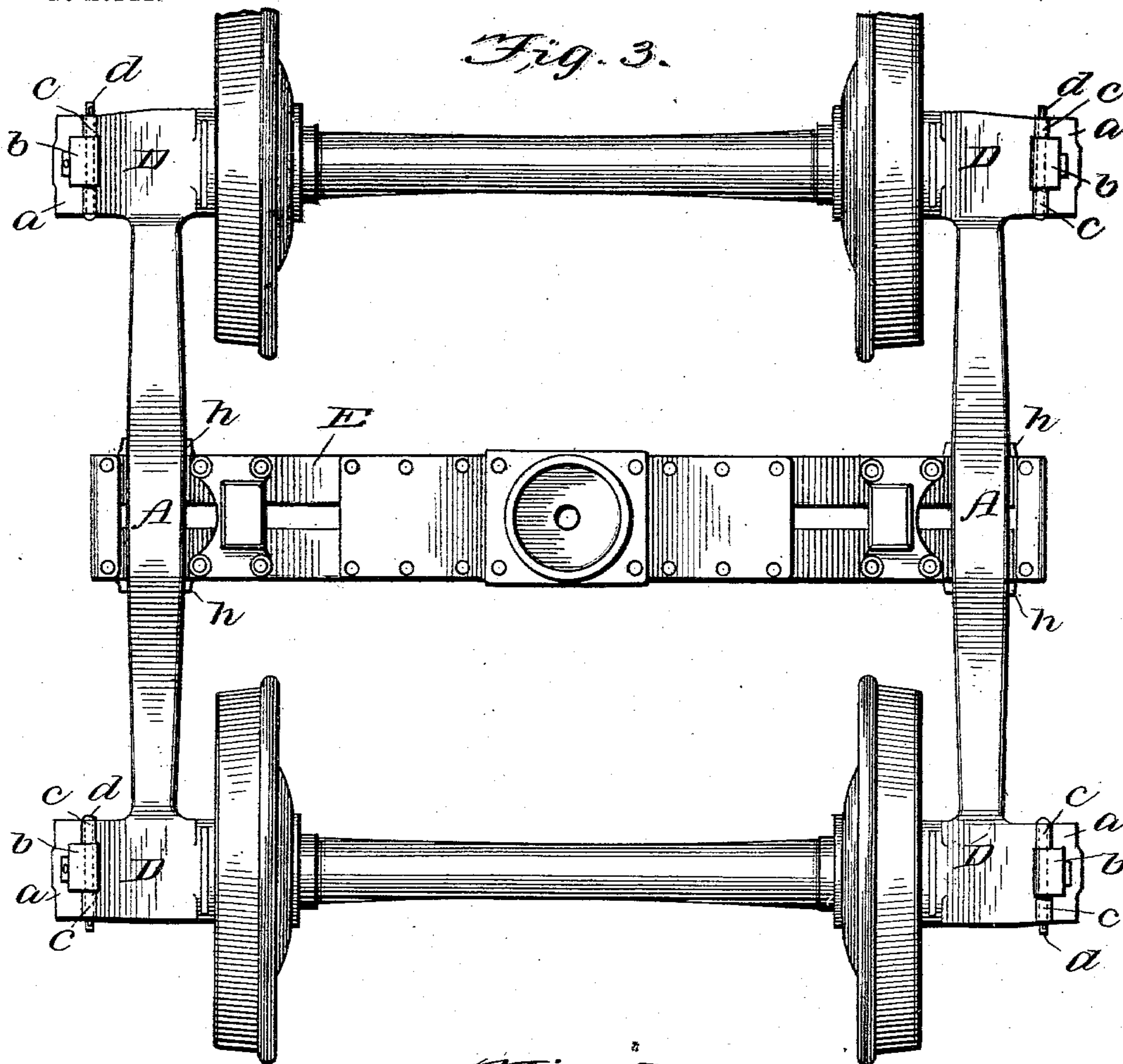
W. P. BETTENDORF.

CAR TRUCK.

APPLICATION FILED JUNE 1, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:

*F. C. Barry.*

*E. K. Lundy*

Inventor:

*William P. Bettendorf.*

*by Frank D. Thomson*  
attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM P. BETTENDORF, OF DAVENPORT, IOWA.

## CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 740,617, dated October 6, 1903.

Application filed June 1, 1903. Serial No. 159,610. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM P. BETTENDORF, a citizen of the United States, and a resident of Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Car-Trucks, of which the following is a full, clear, and exact description.

The aim and purpose of my invention is to provide a car-truck the side frames of which, including the journal-boxes, the spring-platform, and the column-guides, are integral. This I accomplish by the means hereinafter fully described, and as particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a transverse vertical section of said truck, taken on dotted line 2 2, Fig. 1, looking in the direction indicated by the arrows. Fig. 3 is a plan view of one-half of said car-truck, showing one side thereof in full. Fig. 4 is an end view of said truck; and Fig. 5 is a horizontal section through one-half of the length of the side frame of the truck, taken on dotted line 5 5, Fig. 1, looking in the direction indicated by the arrows.

In the drawings, A represents the upper arch of the side frame of the truck; B, the inverted arch thereof; C C, the columns, and D D the journal-boxes. These parts are made of one piece of metal, and it makes no difference, in so far as my invention is concerned, whether the same is made of cast-steel, pressed steel, or otherwise.

The journal-boxes D are preferably of the same design as the well-known Master Car-Builders' journal-boxes except that those features which enable the latter to be removably secured in the ends of the side frame are eliminated. The lids *a* of the journal-boxes are of suitable shape for closing the mouths of the same and are formed with a central knuckle *b*, projecting from their upper edge, which fits between the alining knuckles *c c*, projecting from the upper edge of the mouth of the box and is hinged thereto by the usual pintle *d*.

The openings *e e* of the side frame between the upper and lower arches and the guide-columns C and journal-boxes may be of any desirable shape or may, if desired, be omit-

ted altogether. The space between the column-guides, into which the ends of the truck-bolster E extend, has its lower half made wider by providing said column-guides with corresponding inset or recessed surfaces *g g*. This lower widened space between the column-guides is provided for the purpose of enabling the ends of the truck-bolster to be inserted in place. This widened space, therefore, corresponds to the width of the end of the bolster plus the projection of the guide-blocks *h h*, secured to the sides of the same. The width of the upper half of this space between the columns is such that when said bolster is in its proper position, with the springs G G under its ends, the column-guides will enter the vertical channels in said guide-blocks and direct its movement. The sill of this space in which the ends of the bolsters play is provided with an integral spring-seat H, which consists of a suitable plate or tray the edges of which project beyond the vertical broad sides of the side frame and are preferably supported by the brackets or struts *k k*. While I prefer, however, to have this spring-seat integral with the side frame, it may be made separate and suitably secured thereto.

In order to give rigidity to the side frames and dispense with the necessity of the usual spring-plate, I prefer to connect the same by the spacing or tie bar K, which near each end is provided with a circumferential shoulder I, and has the end portion beyond said shoulder extended through a suitable opening located midway the length of the side frames under the spring-seats and provided with suitable nuts J on its outer screw-threaded extensions to tighten and hold it in place.

The side frames of the truck shown in the drawings are made of cast metal, preferably steel, and it will be noticed that the edges both of its outer contours and the openings therein are provided with lateral flanges. These, besides greatly improving the appearance of the side frames, also add strength to them. This construction may, however, be dispensed with, although I desire to be understood as considering such a side frame, either with or without such flanges, as coming within the spirit of my invention.

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

1. A metal side frame for car-trucks having journal-boxes made integral thereof and  
5 a bolster-opening therein mediate said boxes.
2. A side frame for car-trucks comprising an upper arch, a lower arch, column-guides and journal-boxes made integral of one body of metal.
- 10 3. A metal side frame for car-trucks having lateral flanges and journal-boxes made integral therewith and a bolster-opening therein mediate said boxes.
4. A side frame for car-trucks comprising  
15 an upper arch, a lower arch, guide-columns and journal-boxes made integral of one body of metal, and having the edges thereof flanged.
5. An integral metal side frame for car-trucks the lower portion having a bolster-

opening therein which is wider than the upper portion thereof. 20

6. A metal side frame for car-trucks having journal-boxes made integral therewith and having a bolster-opening therein mediate said boxes the lower portion of which is made  
25 wider than the upper portion.

7. A metal side frame for car-trucks having a bolster-opening therein and having the journal-boxes and the spring-seat on the sill of the bolster-opening made integral there-  
30 with.

In testimony whereof I have hereunto set my hand this 27th day of May, 1903.

WILLIAM P. BETTENDORF.

Witnesses:

W. H. FORREST,  
H. BELLINGHAUSEN.