

No. 671,844.

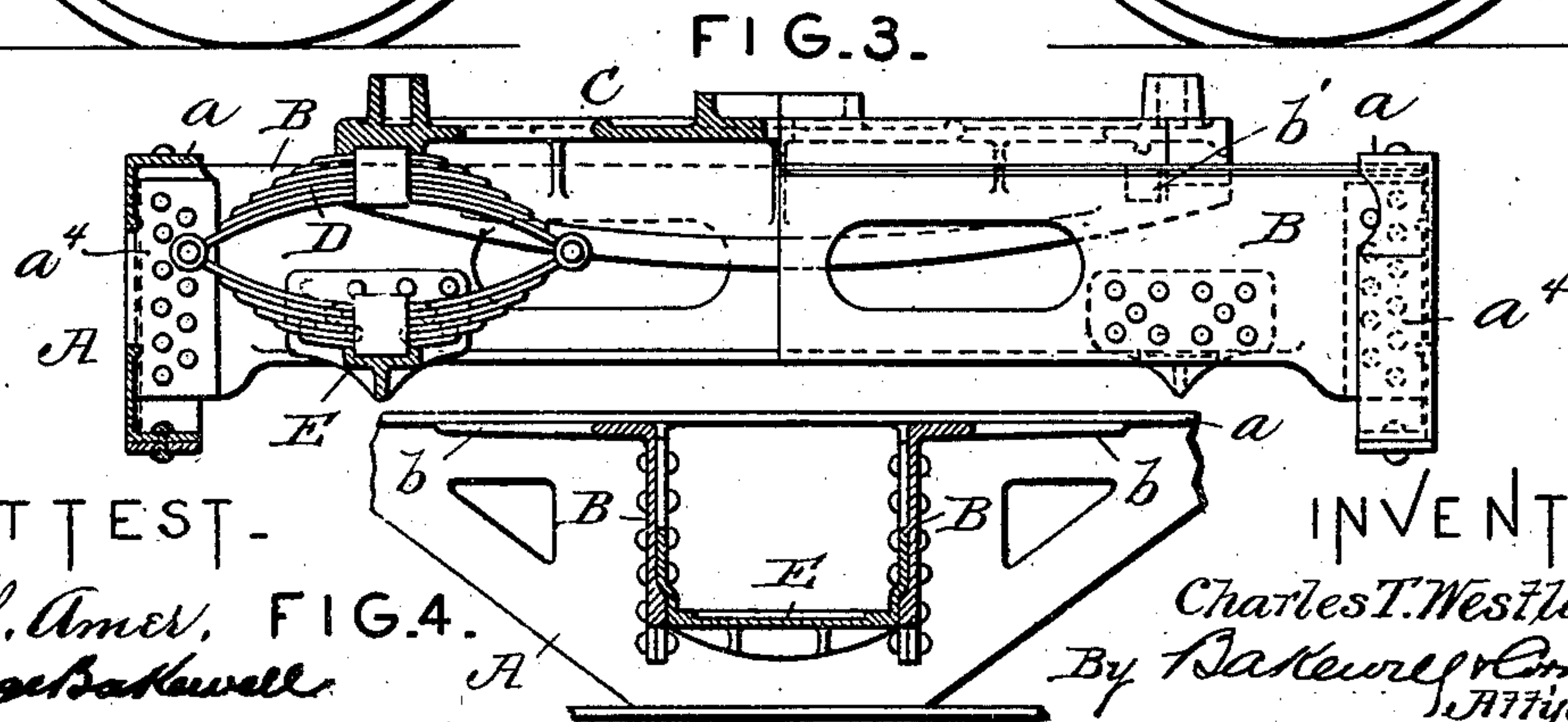
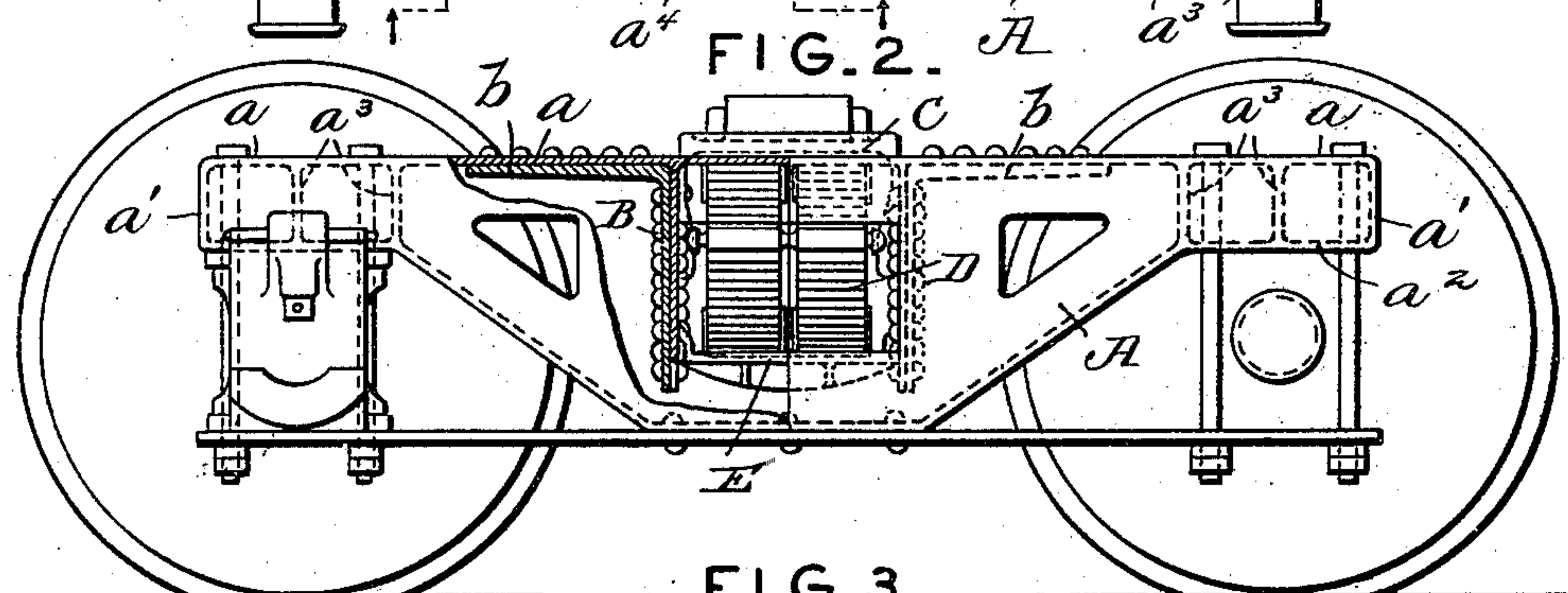
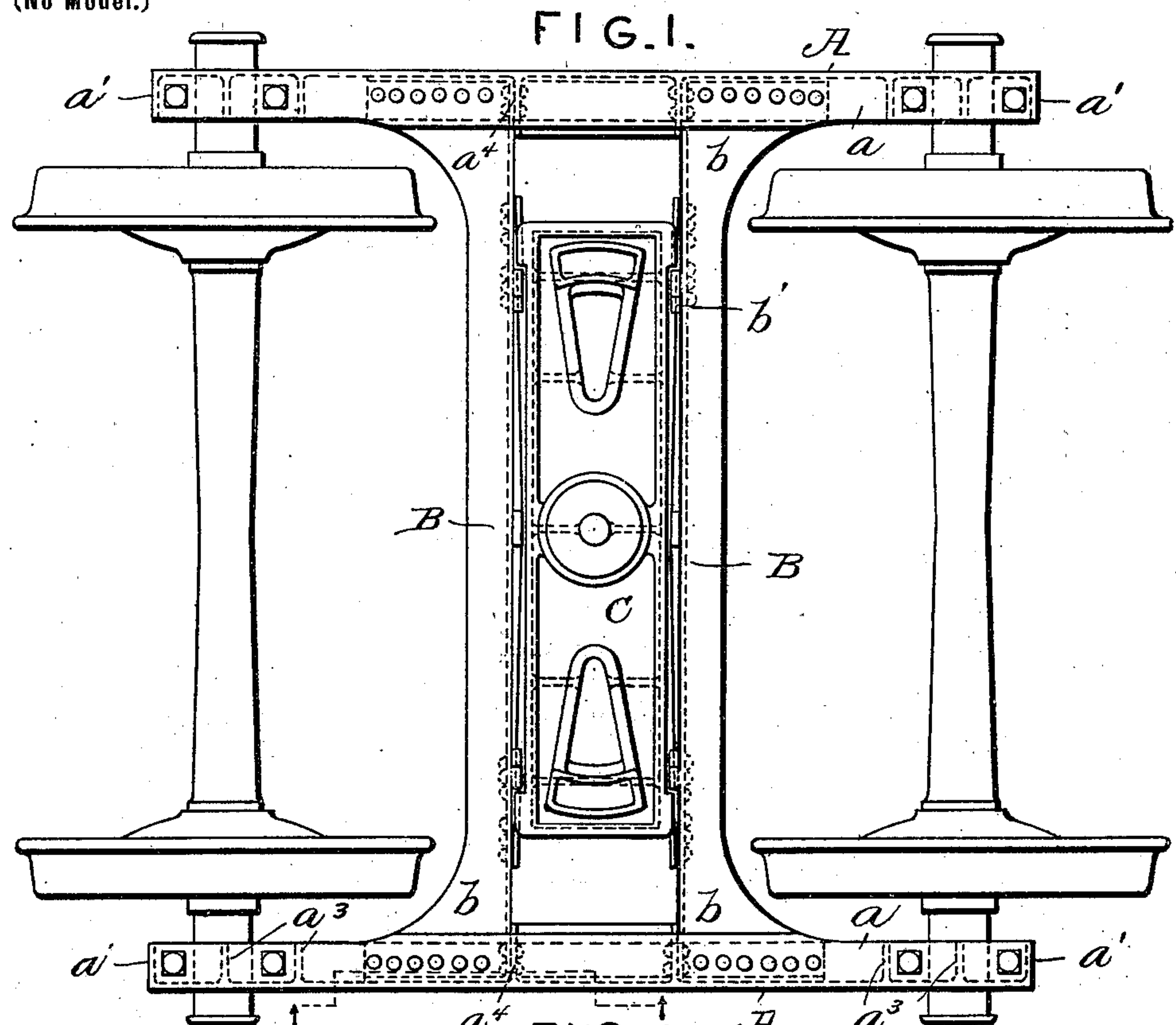
Patented Apr. 9, 1901.

C. T. WESTLAKE.

CAR TRUCK.

(Application filed Feb. 8, 1901.)

(No Model.)



ATTEST.
H. L. Amer. FIG. 4.
George Bakewell

INVENTOR.
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UNITED STATES PATENT OFFICE.

CHARLES T. WESTLAKE, OF GRANITE CITY, ILLINOIS, ASSIGNOR TO EDWARD F. GOLTRA, OF ST. LOUIS, MISSOURI.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 671,844, dated April 9, 1901.

Application filed February 8, 1901. Serial No. 46,523. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. WESTLAKE, a citizen of the United States, residing at Granite City, county of Madison, State of Illinois, have invented a certain new and useful Improvement in Car-Trucks, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved car-truck. Fig. 2 is a side elevational view, partly in section. Fig. 3 is an end elevational view, partly in section, of my improved car-truck; and Fig. 4 is a vertical sectional view on line 4 4, Fig. 1.

This invention relates to a new and useful improvement in car-trucks, being designed particularly for use in connection with tenders for locomotives, though it is obvious that with slight modifications the truck can be adapted to freight and other cars.

The object of the invention is to construct a truck-frame which is simple, being composed of few pieces, and which is also extremely strong.

With this object in view the invention consists of the construction, arrangement, and combination of the several parts, all as will hereinafter be described, and afterward pointed out in the claims.

In the drawings, A indicates the side frame of the truck, which is preferably made up of a casting, the upper edge of said side frame having an inwardly-extending flange a , extending throughout the length of said side frame. This side frame is made deepest at its middle portion, the ends being relatively shallow to accommodate the journal-boxes. The top flange a is integral with vertical end flanges a' , to which latter are joined the bottom flanges a^2 .

a^3 indicates strengthening-webs integral with the flanges a and a^2 and the main web of the side frame, said strengthening-webs a^3 being preferably located above the journal-boxes to strengthen the casting at this point. The flanges are also provided with suitable

openings to receive the column-bolts by which the journal-boxes are secured in position.

a^4 indicates fins or webs preferably integral with the top flange and main web of the side frame, said fins terminating above the bottom flange a^2 to enable the proper manipulation of rivets, which secure the tie-bar in position. The main web of the side frame may be lightened by removing material therefrom at appropriate places.

B indicates transoms, which are shown in the drawings as being Z-shaped, with their top flanges presented outwardly. These transoms are preferably cast, and the top flanges b at the ends thereof diverge or widen to some considerable extent in order to accommodate a row of attaching-rivets passing therethrough and through the top flange a of the side frame. The vertical webs of the transoms are attached to the fins a^4 by suitable rivets, whereby a very rigid connection is made between the transoms and side framing. These transoms are preferably made shallow at their middle portions and deepest at their ends and are so constructed as to provide guiding-ribs b' for the bolster C. This bolster C is shown as being made in one piece and provided with suitable spring-seats for the accommodation of elliptic springs D, while spring-seats E are riveted to the lower edges of the transoms for supporting said springs. These spring-seats E are strengthened by webs and flanges appropriately placed and disposed, as shown.

While I have described a construction having a slat spring-seat, it is obvious that a stirrup could be employed in connection with said bolster should it be desired to use my improved truck-frame in connection with the well-known type of swing-motion bolster. Furthermore, instead of supporting the bolster on springs the side framing could be provided with pedestal-jaws for the reception of the journal-boxes, above which the springs could be used, as is well understood; also, while I have described my improved side frame and transoms as being made up of castings, preferably of steel, it will be understood that the same could be formed of malleable iron, or sheet metal could be used by being pressed or bent into shape. However,

I prefer to use cast-steel, as the integrality of parts obviates the necessity for so many rivets as are usually required in pressed-steel trucks.

- 5 I am aware that minor changes in the construction, arrangement, and combination of the several parts of my truck can be made and substituted for those herein shown and described without in the least departing from
10 the nature and principle of my invention.

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

1. In a car-truck, the combination with the
15 side frames, of transoms having their top flanges presented outwardly, said flanges being widened at the ends of the transoms and attached to inwardly-extending flanges at or near the upper edges of said side frames, substantially as described.
20

2. In a car-truck, the combination with a side frame provided with vertical fins and an inwardly-extending top flange, of transoms having top flanges presented outwardly, said
25 flanges of said transoms being widened at the ends and riveted to the top flange of the side frame, the vertical webs of the transoms being riveted to the inwardly-extending fins of the side frame, substantially as described.

- 30 3. In a car-truck, the combination with a side frame made deepest at its middle portion,

provided with an inwardly-extending marginal flange, of strengthening-webs between said flanges above the journal-boxes, inwardly-extending fins a^4 , transoms whose top flanges
35 are widened at their ends and riveted to the top flange of the side frame, the vertical web of the transoms being riveted to said fins, and a bolster supported between said transoms, substantially as described.
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4. In a car-truck, the combination with a side frame made deepest at its middle portion and provided with inwardly-extending marginal flanges, of Z-shaped transoms having
45 their top flanges presented outwardly and widened at the ends, where they are secured to the side frame by suitable rivets, the bottom flanges of said transoms extending inwardly and receding to the main web of the transoms near the ends thereof, and removable
50 spring-seats arranged between the transoms and shaped to accommodate said inwardly-extending bottom flanges, substantially as described.

In testimony whereof I hereunto affix my
55 signature, in the presence of two witnesses, this 6th day of February, 1901.

CHARLES T. WESTLAKE.

Witnesses:

WM. H. SCOTT,
H. L. AMER.