

No. 658,496.

Patented Sept. 25, 1900.

G. T. WILLIS.
WAGON OR TRUCK GEAR.
(Application filed Apr. 25, 1900.)

(No Model.)

Fig. 2.

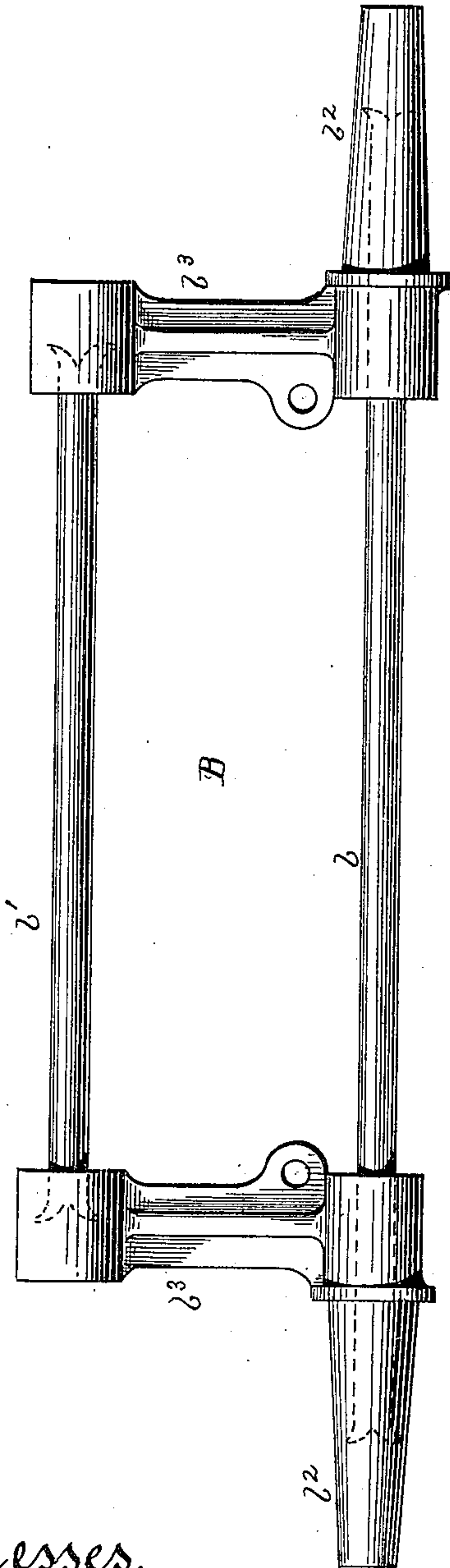
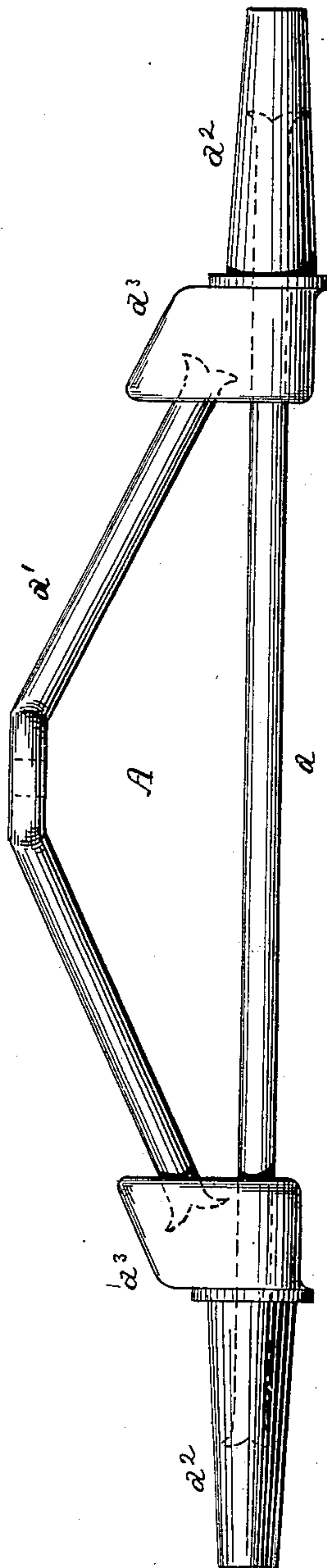


Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

GLENN T. WILLIS, OF FRESNO, CALIFORNIA, ASSIGNOR TO JAMES PORTEOUS, OF SAME PLACE.

WAGON OR TRUCK GEAR.

SPECIFICATION forming part of Letters Patent No. 658,496, dated September 25, 1900.

Application filed April 25, 1900. Serial No. 14,298. (No model.)

To all whom it may concern:

Be it known that I, GLENN T. WILLIS, a citizen of the United States, residing at Fresno, county of Fresno, and State of California, have invented certain new and useful Improvements in Wagon or Truck Gear; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to vehicle-gears especially adapted for wagons and trucks.

It consists in the novel constructions which I shall hereinafter describe and claim.

The objects of my invention are simplicity and ease of construction and lightness with strength.

Referring to the accompanying drawings, Figure 1 is an elevation of the front gear. Fig. 2 is an elevation of the rear gear.

A, Fig. 1, is the front gear of wagon, truck, or other vehicle. It consists of a steel axle-bar a and a steel truss-bar a' , upon the latter of which the bolster or head block is supposed to rest and to be connected by the usual king-bolt. Upon the extremities of both steel bars a and a' are the cast-iron pieces, each piece forming an axle-journal a^2 and a standard a^3 . These castings are cast directly upon the steel bars, the ends of the latter being split, as shown by dotted lines, which is the usual practice when castings are cast on steel, the object being to prevent loosening of the parts. The axle-bar a , as will be seen by its dotted extremities, has the journal part a^2 of the casting cast upon it, while each end of the truss-bar a' has the standard a^3 cast upon it.

In Fig. 2, B is the rear gear. This construction is similar to the front gear. Thus b is the steel axle-bar, b' is the steel cross-bar or truss to support the vehicle-bed, b^2 is the axle-journal part of the casting cast on the axle-bar ends, and b^3 is the standard part of the casting cast on the truss-bar ends.

Although I have here shown the castings as each composed of a journal part and a standard part and as being cast upon and uniting the corresponding ends of the two steel bars, I do not confine myself to this exact and full construction, for in some cases the steel truss

or supporting bar of the gear may be bolted or secured to the standard part of the casting by means other than by casting said casting upon it. Also it will be seen that in order to insure the necessary strength I have shown the end of the axle-bar as extending a sufficient distance into the journal part of the casting beyond the collar-flange to provide a resistance to strain equal to both the steel bar and the casting. When strength of axle alone is required, the castings may consist only of the journal parts, leaving the standards to be otherwise constructed.

This construction of parts results in ease and economy of manufacture, avoiding all threads and bolts; and it gives lightness with strength and with proper wearing-surface for the journals.

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

1. A vehicle-gear consisting of a steel axle-bar, a separate steel truss-bar above the axle-bar and forming a support for the vehicle-bed, and castings, each formed with a journal part suitably secured upon the end of the axle-bar, and a standard part suitably secured to the end of the truss-bar.

2. A vehicle-gear consisting of a steel axle-bar, and a separate steel truss-bar above the axle-bar and forming a support for the vehicle-bed, and castings, each formed with a journal part cast directly upon the end of the axle-bar, and a standard part suitably secured to the end of the truss-bar.

3. A vehicle-gear consisting of a steel axle-bar, and a steel truss or supporting bar, and castings cast directly, one on one end of the two steel bars, and one on the other end thereof, said castings being each formed with a journal part cast upon the axle-bar extremity, and a standard part cast upon the truss or supporting bar extremities.

In witness whereof I have hereunto set my hand.

GLENN T. WILLIS.

Witnesses:

W. J. KETTRELL,
W. T. PORTER.