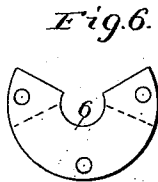
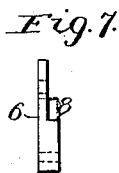
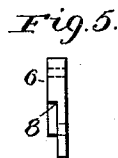
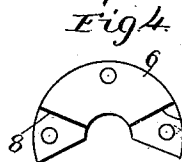
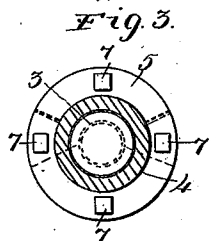
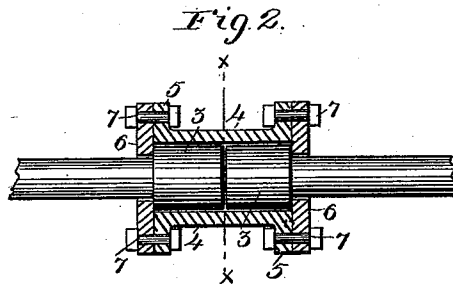
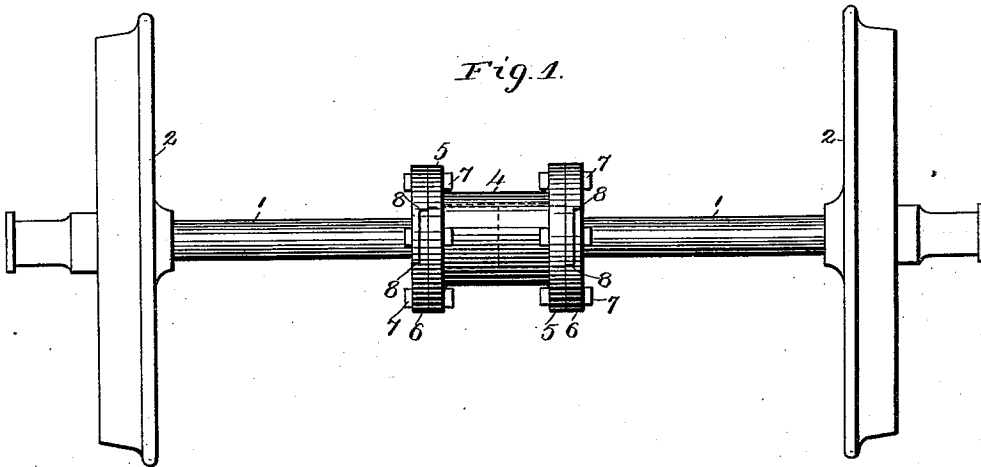


(No Model.)

E. P. JORDAN.
CARRIAGE AXLE.

No. 554,520.

Patented Feb. 11, 1896.



Witnesses
Alfred A. Mather
Philip R. Stark

Inventor
Edmund P. Jordan.

By *His Attorneys*

Keller & Stark

UNITED STATES PATENT OFFICE.

EDMUND P. JORDAN, OF ST. LOUIS, MISSOURI.

CARRIAGE-AXLE.

SPECIFICATION forming part of Letters Patent No. 554,520, dated February 11, 1896.

Application filed November 8, 1895. Serial No. 568,299. (No model.)

To all whom it may concern:

Be it known that I, EDMUND P. JORDAN, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Car-Axles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in car-axles; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is an elevation of my invention, showing the wheels attached to the axle. Fig. 2 is a detail showing the meeting ends of the axle-sections, and the casing by which they are supported in section. Fig. 3 is a section on $x x$ of Fig. 2. Fig. 4 is a plan view of one of the cover-plates embracing the axle. Fig. 5 is an end view thereof. Fig. 6 is a plan view of the second or adjacent cover-plate, and Fig. 7 is a side elevation or end view thereof.

The object of my present invention is to construct the axle of car-wheels in two sections, whereby the slipping of the inner wheel as the car is passing a curve is prevented, allowing each wheel to revolve independently of the other. It is well known that with axles as ordinarily constructed of a single piece, and to the opposite ends of which the wheels are secured, one of the wheels (that traveling on the inner rail) as the car is passing a curve necessarily slips by reason of the difference in the length of the rail over which the wheels must simultaneously pass. By my present improvement the objectionable slipping is overcome.

In detail the improvement may be described as follows:

Referring to the drawings, 1 1 represent the two sections of the axle, to the outer ends of each of which the wheels 2 are secured. The

sections 1 1 are preferably of equal length, the contiguous inner or abutting ends of the wheels having formed integral therewith the enlarged cylindrical ends or heads 3, said ends being adapted to be supported by an outer sleeve or casing 4 having terminal outwardly-turned flanges 5. The casing thus forms a bearing for the inner ends of the axle-sections, permitting each to rotate freely therein and independently of one another.

To retain the parts firmly in place I provide segmental cover-plates 6 6 at either end of the casing, said plates being adapted to embrace the axle-sections and to be secured to the flanges 5 by bolts 7, the adjacent surfaces of the overlapping portions of the plates being each radially lapped or cut to a depth equal to the shoulder 8, whereby the surface of the overlapping portion of one plate will be continuous with the adjacent surface of the other plate. This construction enables the parts to be readily disassembled, permitting the ready removal or withdrawal of one axle-section without removing the casing from the contiguous section.

Having described my invention, what I claim is—

An axle composed of two sections, a wheel adapted to be secured at the outer end of each section, an enlarged cylindrical head forming a part of the contiguous or inner ends of the said sections, a casing embracing said heads, an outwardly-turned flange at either end of the casing, and suitable segmental retaining-plates embracing the axle and forming a lap-joint with one another, and suitable bolts for securing said overlapping plates to the flanges of the casing, substantially as set forth.

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

EDMUND P. JORDAN.

Witnesses:

ALFRED A. MATHEY,
EMIL STAREK.