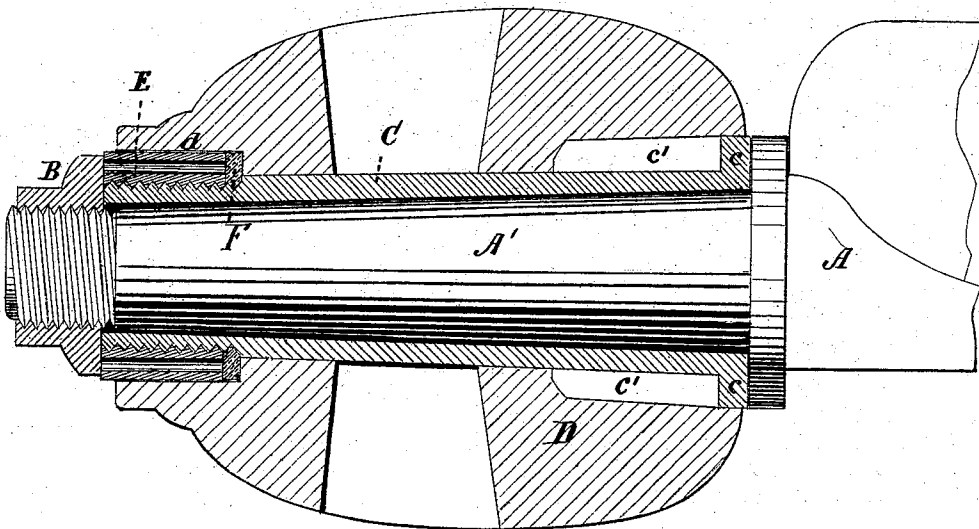


CHARLES AHRENBECK.

Improvement in Axle-Boxes for Vehicles.

No. 127,821.

Patented June 11, 1872.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES AHRENBECK, OF NAVASOTA, TEXAS.

IMPROVEMENT IN AXLE-BOXES FOR VEHICLES.

Specification forming part of Letters Patent No. 127,821, dated June 11, 1872.

Specification describing an Extensible Axle-Box, invented by CHARLES AHRENBECK, of Navasota, in the county of Grimes and State of Texas.

The invention consists in forming an axle-box, with an adjustable tube, which may take up the wear on its ends and enable the wheel to be always and easily retained in its true relative position to axle.

It is found, by coach-makers and those who let vehicles for hire, that there is great end wear on the axle-box, and that, unless this play is quickly remedied, the wheel is caused to wobble, subsequently to wear the box unequally, and in a short time to make it practically worthless.

By the use of the extensible box, hereinafter described, this difficulty is obviated, while the axle-box is made to last much longer and the wheel to run always with a uniform friction.

In the accompanying drawing my invention is represented by an axial section of a carriage-wheel hub and axle-box.

A represents a carriage-axle having threaded end, journal A', shoulder *a*, and ordinary nut B. C is an axle-box, which is provided with rear flange *c* and ribs *c'*. This box is driven into the hub D in the usual way, and held

therein by friction. The end of this box C has a thread, on which screws the tube E, while the hub D has a deep recess, *d*, wherein this tube may be located. F is a thin annular washer placed between the tube and the hub.

The operation is as follows: As the box C revolves on axle A A' the nut B wears the front face of tube E and box C, while the shoulder *a* of axle wears the outer face of the shoulder C of box. Hence, attention at short intervals is required, when another and another of these washers should be inserted as the abrasion increases.

By this construction the wheel can always be held in a plane at right angles to that of the axle, while the box will be rendered greatly more durable.

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

The adjustable tube E applied on the end of an axle-box between the axle-nut and the hub, and in connection with one or more washers, F, as and for the purpose described.

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