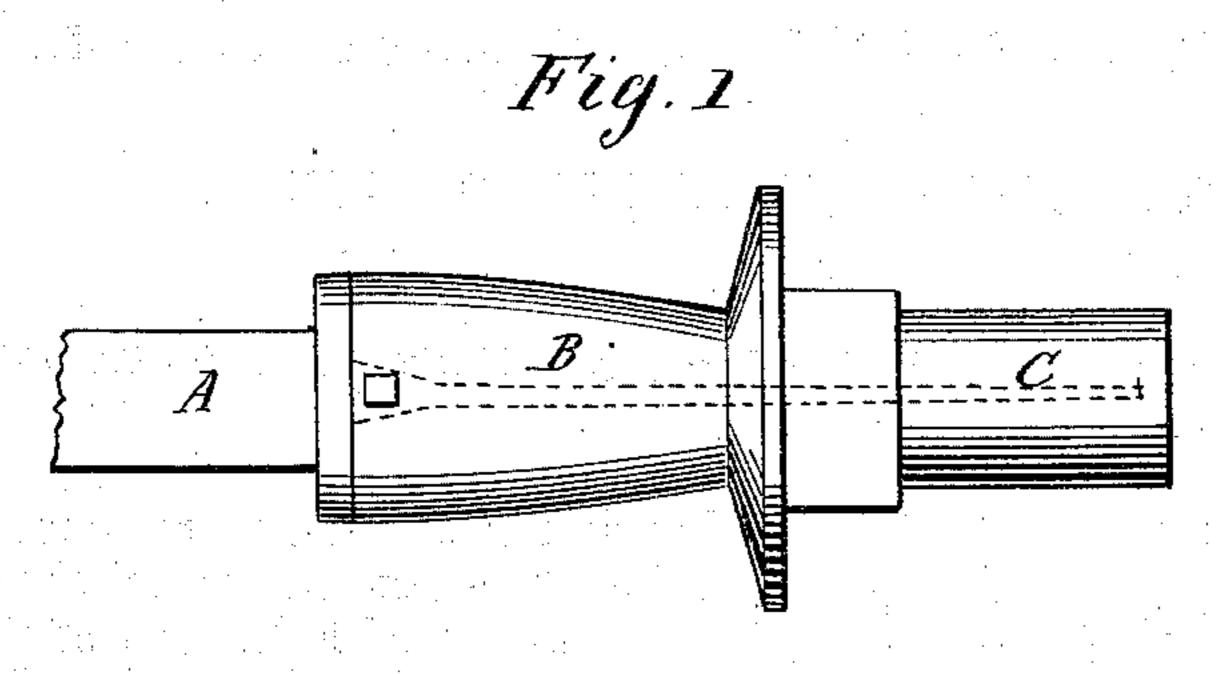
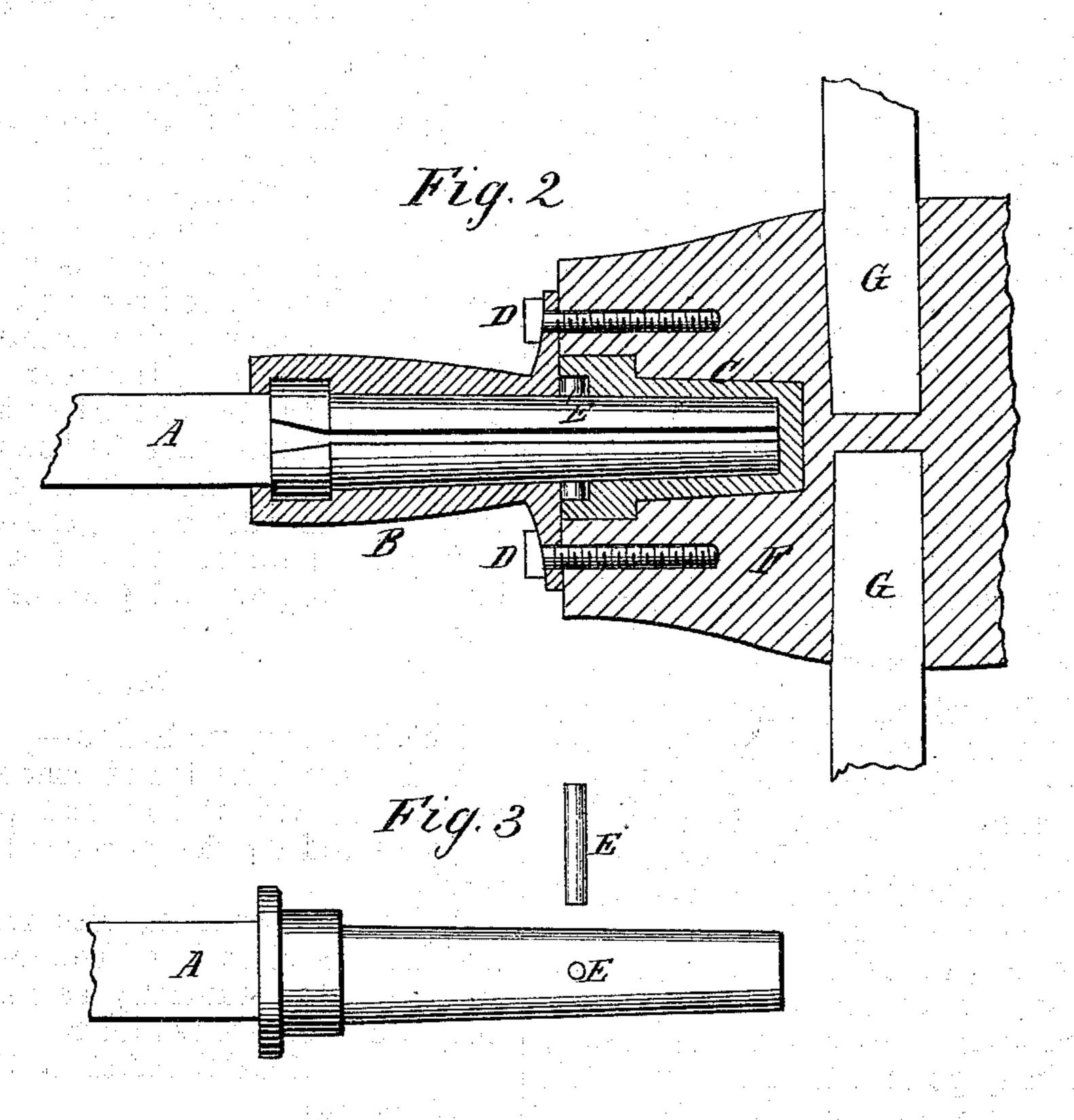
A. B. CRANDALL.

Improvement in Carriage-Axle.

No. 127,222.

Patented May 28, 1872.





Witnesses Millabooch Ming Lane Inventor Admiram B. Crundall

United States Patent Office

ADONIRAM B. CRANDALL, OF SUMNER, ILLINOIS.

IMPROVEMENT IN CARRIAGE-AXLES.

Specification forming part of Letters Patent No. 127,222, dated May 28, 1872.

SPECIFICATION.

I, ADONIRAM B. CRANDALL, of the town of Sumner, in the county of Kankakee and State of Illinois, have invented certain Improvements in Carriage-Axles, of which the following is a specification:

Nature and Objects of the Invention.

This invention relates to the construction of carriage axles and boxes in such a manner that we may attain the following objects: first, to make a stronger and more durable wheel; second to facilitate the operation of oiling the vehicle, and also in confining the oil so that it cannot run into the spokes or out of the front end of hub.

Description of the Accompanying Drawing.

Figure 1 is a view of an axle embodying my invention. Fig. 2 is a vertical transverse section, showing an interior view as applied. Fig. 3 is a view of the spindle.

General Description.

A is the spindle, which is constructed like carriage-spindles in general, with the exception of the screw on the end and the addition of the hole, as seen in Fig. 3, for the reception of pin E, as seen in Fig. 2. For wood axles we cast a sleeve or thimble to receive the wood. B is the rear section of the box, constructed with flange for the purpose of securing it firmly to the hub with wood-screws D D, as seen in Fig. 2. Said flange may be either cast solid to this box or may go on with a screw. This box is held to its place on spindle A by pin E. C is the front section of box, constructed as seen in Fig. 2, the rear end being square in or-

der that it may be more firmly secured in the hub. This box has an oil-chamber in the rear end capable of holding a sufficiency of oil to last a long time, the front end being closed, so that there is no waste of oil. F is the hub, in which are represented the spokes G G, as seen in Fig. 2.

The method of applying this invention is to set box C in hub F, the rear end coming out flush with rear end of hub. The wheel is then placed upon spindle A, on which is already the rear box B, secured to its place by pin E. We then screw the rear box B firmly to the hub F with the wood-screws D D.

It will be seen, by referring to Fig. 2, that the box C comes to the rear of spokes G G, so that neither the spokes or hub have to be weakened in inserting the box C. In oiling we pour the oil into the oil-hole in rear end of box B, which runs down the groove in spindle A, filling the chamber in box C with oil, and this box revolving around pin E makes it self-oiling.

Claims.

I claim as my invention—

1. The combination of rear section B, front section C, and of box and pin E, substantially as and for the purpose hereinbefore set forth.

2. The combination, with the rear section B and front section C, of box and pin E of the spindle A, substantially as and for the purpose hereinbefore set forth.

ADONIRAM B. CRANDALL.

Witnesses:

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