

No. 885,502.

PATENTED APR. 21, 1908.

J. C. MESSER.
BUGGY SPINDLE.
APPLICATION FILED APR. 15, 1907.

Fig. 1.

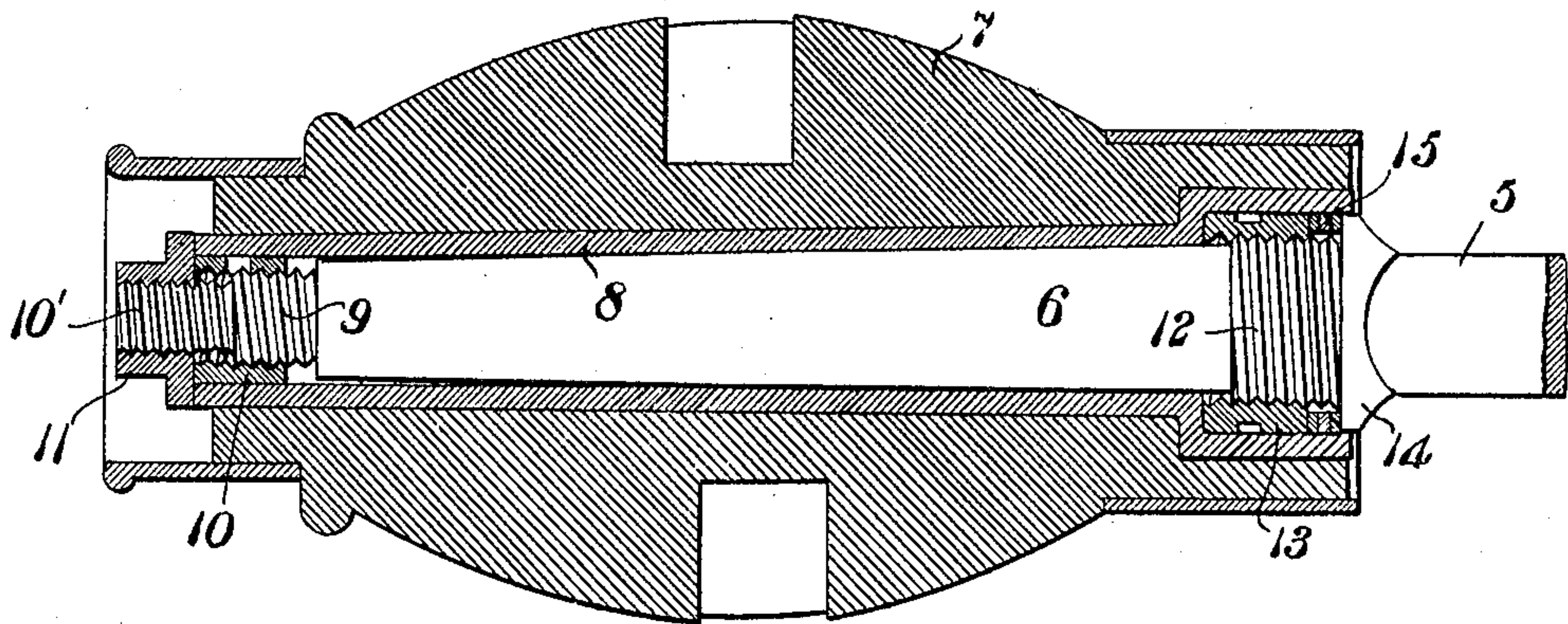
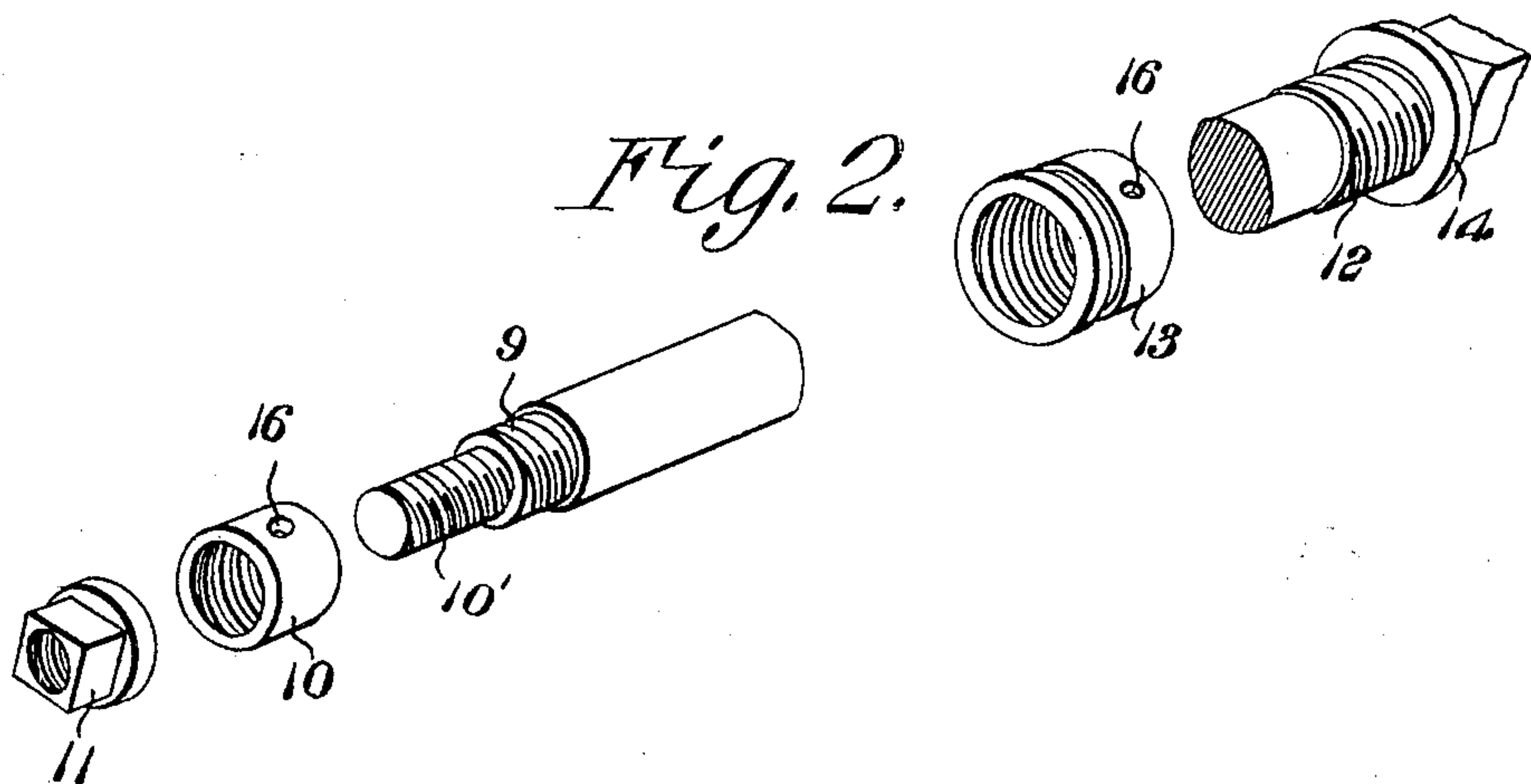


Fig. 2.



WITNESSES:

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JEREMIAH CLARK MESSER, OF AUSTIN, TEXAS, ASSIGNOR OF ONE-THIRD TO ROBERT C. LAMBIE AND ONE-THIRD TO JEFFERSON COOK, OF AUSTIN, TEXAS.

BUGGY-SPINDLE.

No. 885,502.

Specification of Letters Patent.

Patented April 21, 1908.

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To all whom it may concern:

Be it known that I, JEREMIAH CLARK MESSER, a citizen of the United States, residing at Austin, in the county of Travis and State of Texas, have invented a new and useful Buggy-Spindle, of which the following is a specification.

This invention relates to vehicle axles and has for its object to provide means for taking up lost motion in the axle-box should the latter be too short or become unduly worn.

A further object of the invention is to provide a spindle having a collar threaded on one end thereof for engagement with the adjacent end of the axle-box and provided at its opposite end with a sleeve adapted to form a bearing for the opposite end of the spindle, said collar and sleeve being adjustable longitudinally of the spindle thereby to prevent movement of the axle-box with respect to said spindle.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claim.

In the accompanying drawings forming a part of this specification: Figure 1 is a longitudinal sectional view of an axle-box and spindle constructed in accordance with my invention. Fig. 2 is a perspective view of the several parts which make up the spindle detached.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved device may be used in connection with the axles of buggies, carriages, wagons and other vehicles and by way of illustration is shown applied to a buggy-axle of the ordinary construction in which 5 designates the axle, 6 the spindle and 7 the hub provided with the usual boxing 8.

The reduced end of the spindle 6 is provided with a threaded portion 9 which engages the interior threads of an adjustable sleeve 10 which forms a bearing for the axle-box 8, said spindle being provided with a reduced threaded extension 10' on which is mounted for rotation a nut 11 adapted to

bear against the adjacent end of the axle-box 8 and thereby prevent longitudinal movement of the same. The spindle 6 of the axle 5 is threaded externally, as indicated at 12 for the reception of a collar 13 which bears against the adjacent end of the axle-box 8 and serves to take up any lost motion in said axle-box should the latter be too short or rendered so from constant wear on the several parts.

Interposed between the collar 13 and the shoulder 14 are one or more washers 15 which may be placed in position on the threaded end 12 of the spindle when the collar 13 is adjusted longitudinally in engagement with the axle-box. The sleeve 10 and the collar 13 are each provided with an aperture or recess 16 adapted to receive the terminal of a spanner or other suitable tool to assist in removing the same from the spindle.

The operation of the device is as follows: Should the axle-box be too short or become unduly worn the collar 13 is rotated on the threaded portion 12 of the spindle into engagement with the adjacent end of the axle-box thus effectually taking up any lost motion in the axle-box and preventing the latter from wobbling. Should the front end of the axle-box become worn from excessive end play or from other causes the sleeve 10 is adjusted longitudinally of the threaded portion 9 of the spindle after which the nut 11 is rotated on the threaded extension 10' into engagement with the adjacent end of the axle-box, thus forcing the opposite end of the axle-box against the collar 13 and effectually preventing end play.

Attention is here called to the fact that the sleeve 10 not only serves as a bearing for the axle-box but also serves as a lock to prevent accidental displacement of the nut 11. The sleeve 10 and the collar 13 being threaded on the spindle may be readily removed and replaced when the same becomes worn or otherwise injured from constant use.

From the foregoing description it will be seen that there is provided an extremely simple, inexpensive and efficient device admirably adapted for the attainment of the ends in view.

Having thus described the invention what is claimed is:

The combination with a spindle having one end thereof provided with threaded extensions of different cross-sectional diameters,

of an axle-box surrounding the spindle, a collar carried by one end of the spindle and bearing against the adjacent end of the axle-box, a sleeve threaded on one of the extensions of the spindle and engaging the interior walls of the axle-box to form a bearing for the latter, and a nut threaded on the adjacent extension of the spindle and provided with a flat imperforate bearing face adapted to engage the adjacent end of the sleeve and

axle-box, respectively said collar and sleeve being provided with apertures for the reception of a spanner.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JEREMIAH CLARK MESSER.

Witnesses:

Z. T. JUTMORE,

J. H. RAYMOND, Jr.