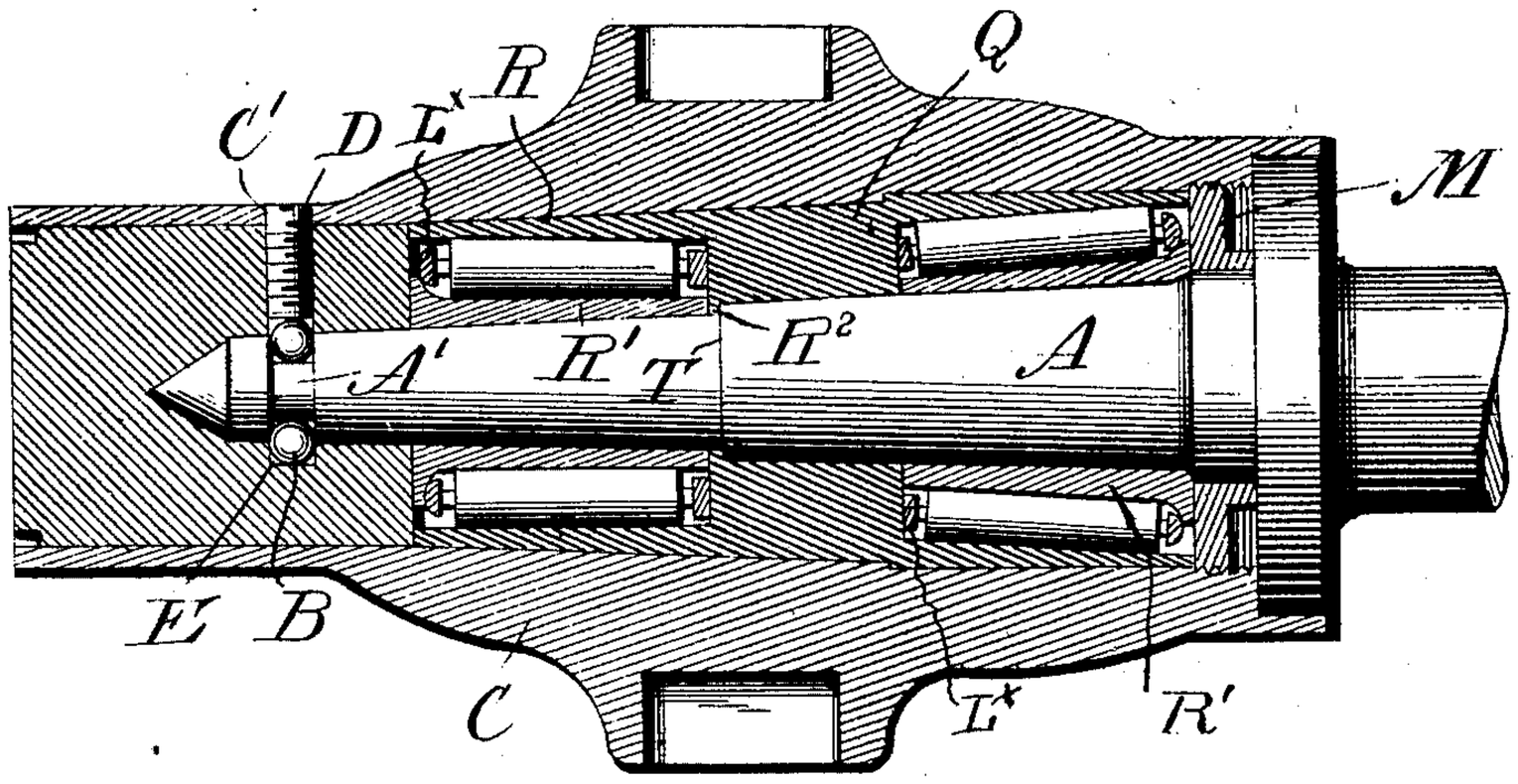
No. 699,466. Patented May 6, 1902.

C. C. HUBBARD.

ROLLER BEARING.

(Application filed Sept. 16, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

CLEVELAND C. HUBBARD, OF LAFAYETTE, INDIANA.

ROLLER-BEARING.

SPECIFICATION forming part of Letters Patent No. 699,466, dated May 6, 1902.

Application filed September 16, 1901. Serial No. 75,476. (No model.)

To all whom it may concern:

Be it known that I, CLEVELAND C. HUBBARD, a citizen of the United States, residing at Lafayette, in the county of Tippecanoe and State of Indiana, have invented certain new and useful Improvements in Roller-Bearings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in roller-bearings for spindles for various purposes; and it consists in the provision of two series of antifriction-rollers which are mounted in bearing-rings held between shell-sections adapted to be mounted about the spindle of a shaft, means being provided to hold the rings carrying said rollers in position.

The invention relates, further, to various combinations and arrangement of parts, and will be hereinafter more fully described and then specifically defined, and is illustrated in the accompanying drawing, which, with the letters of reference marked thereon, forms a part of this application, and in which I have shown a longitudinal vertical section through the hub and roller-bearing rings, the antifriction-roller and spindle being shown in elevation.

Reference now being had to the details of the drawing by letter, A designates the spindle of shaft of a vehicle, said shaft having an annular groove A′ near one end to receive the antifriction-balls B.

C designates a hub of a wheel which is chambered out to receive the antifriction-rollers within and is apertured at C′, in which a threaded plug D engages, said aperture C′ being provided for the purpose of allowing the antifriction-balls B to be inserted into the groove A′. A similar groove E is formed in the inner circumference of the hub, which groove registers with the groove A′, adapted to receive the series of balls B and throw the bearing between the spindle and the boxing or hub upon said balls. Said spindle A has a shoulder T at any suitable location, and Q designates a shell having a central thickened portion, with an integral angular flange R^2, which when said shell is placed upon the spindle is adapted to bear against the shoulder T. Mounted upon the spindle of the axle are two cylindrical shells R′, each having a flanged end, and the inner ends of said shells R′ are adapted to abut against the opposite ends of the central thickened portion of shell Q. Antifriction-rollers are mounted in the bearing-rings L′ and $L^{\times}$, which are held between the outer flanged end of the shells R′ and the opposite ends of the thickened portion of shell Q. A threaded collar N is adapted to be screwed within the hub and bears against the flanged end of the inner shell R′, mounted on the spindle, whereby the various parts are held in place.

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

In combination with the hub and axle, having a shoulder T, a shell Q having a central portion with thickened wall, an integral annular flange R^2, in the bore of said shell, designed to contact with said shoulder, the shells R′ reversely arranged on the opposite sides of the central thickened portion of shell Q, and abutting against the same and the rings $L^{\times}$, rollers journaled in said rings, and means for holding the parts in place, as set forth.

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

CLEVELAND C. HUBBARD.

Witnesses:
GEO. J. EACOCK,
FLORENCE V. RAYNOR.