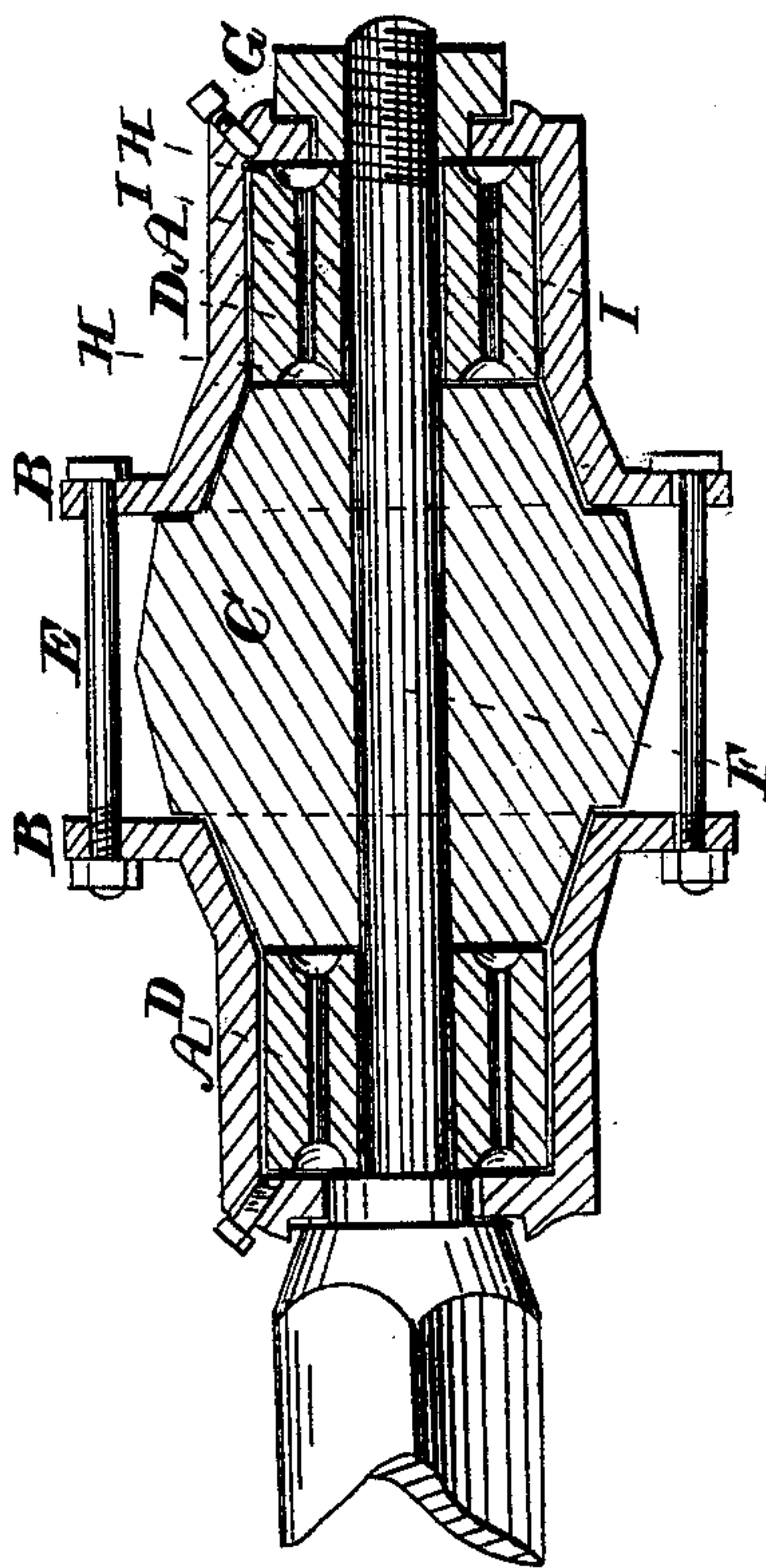


H. V. BELDING.

Wheel Hub.

No. 91,302.

Patented June 15, 1869.



Witnesses.

Amichman
Wm R Brooks

Inventor.

H V Belding
PER *Mumford*
Atty.

UNITED STATES PATENT OFFICE.

H. V. BELDING, OF OPPENHEIM, NEW YORK.

IMPROVEMENT IN CARRIAGE-HUBS.

Specification forming part of Letters Patent No. **91,302**, dated June 15, 1869.

To all whom it may concern:

Be it known that I, H. V. BELDING, of Oppenheim, in the county of Fulton and State of New York, have invented a new and useful Improvement in Wheel-Hubs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The object of this invention is to provide certain improvements in the construction of hubs for wagon-wheels, calculated to reduce the friction, facilitate oiling, and to economize in the cost of construction.

The drawing represents a longitudinal sectional elevation of my improved hub. The said improved hub consists of two cast-metal flanged circular cases, A, a central wood portion, C, and two short axle-boxes, D. The said cases are slightly bell-mouthed at the ends, having the flanges B, and they have small central end openings. These cases are firmly clamped against the tapered ends of the central wood blocks C, which fit the tapered sockets of the cases. This wood part C is designed for the connection of the spokes in the usual way, the clamping-bolts E passing between the spokes.

Within the cases A, beyond the tapered parts thereof, I place axle-boxes D, fitted sufficiently loose to be capable of turning in the

said cases. These boxes are kept in place by the walls of the cases, and the ends of the wood part C and the axle F pass through axial holes therein, projecting sufficiently to receive a nut, G, screwed upon the axle in the usual way.

For lubricating the axle and the boxes, I make grooves H in the ends of the latter, and small communicating holes I, so that when the oil is supplied to the spaces inclosing the axle-boxes, through holes in the cases A, it will circulate freely from end to end of the said boxes. The said holes may be plugged, and the nuts G, being screwed up against the ends of the case, will prevent any material escape of oil.

This construction permits the boxes to turn to some extent when the axle becomes cramped, whereby the friction is to some extent reduced, and whereby the boxes will wear evenly, and they may be readily removed, for the substitution of others, when worn out.

The whole may be made very cheaply, requiring but little expensive fitting.

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

The cases A, shaped as described, the wood hub C, and the axle-boxes D, combined and arranged substantially as specified.

H. V. BELDING.

Witnesses:

HELOM BRUNKHORST,
WINFIELD S. BRUNKHORST.