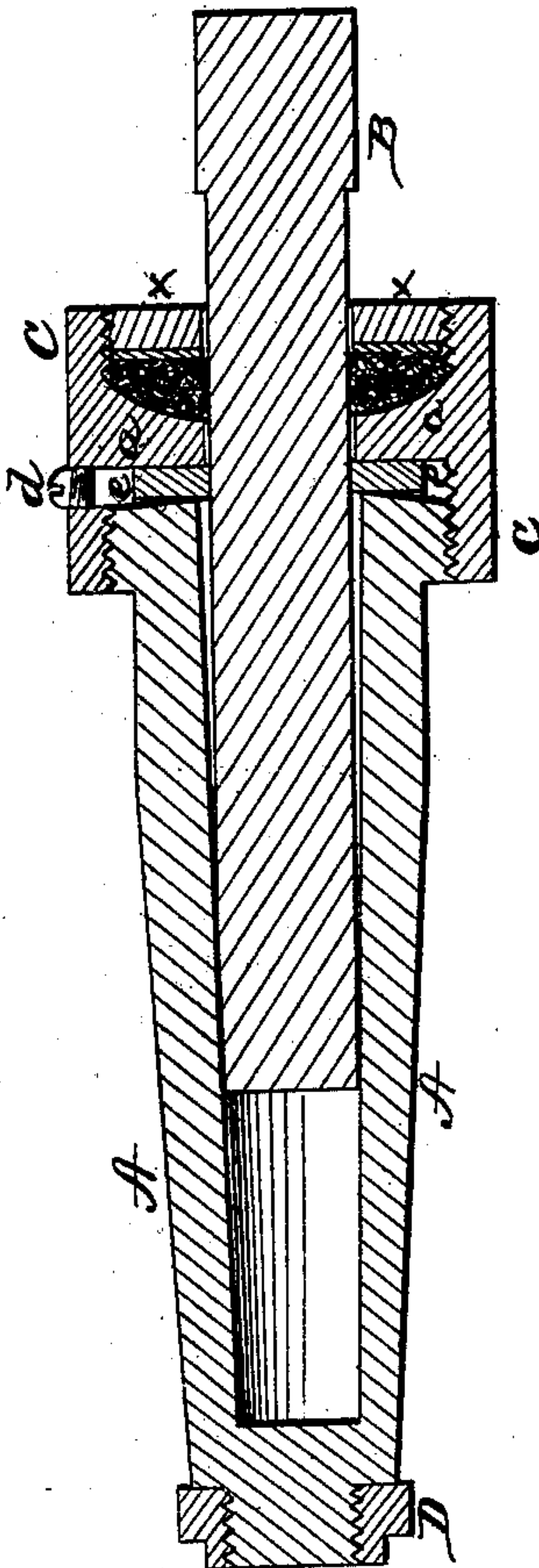


Z. HUGGINS.
Hub-Attaching Device.

No. 225,836.

Patented Mar. 23, 1880.



WITNESSES.

Frank L. Curand
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By

INVENTORS

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UNITED STATES PATENT OFFICE.

ZADOCK HUGGINS, OF ALLEGAN, MICHIGAN.

HUB-ATTACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 225,836, dated March 23, 1880.

Application filed February 19, 1880.

To all whom it may concern:

Be it known that I, ZADOCK HUGGINS, of Allegan, in the county of Allegan, and in the State of Michigan, have invented certain new and useful Improvements in Axles for Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and use of a device for securing axles to vehicles and for oiling the same, the peculiarities of which will be hereinafter described.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing, making a part of this specification, and which is a longitudinal section, A represents the box of a hub for vehicles, and B the arm of the axle which passes into it. This box is closed at its outer end, as seen, and is provided with a nut, D, for the purpose of keeping it from drawing out of the hub. The inner end of the box is provided with a shoulder, upon which is cut a screw-thread.

C represents a metallic band, which surrounds the axle and a portion of the box A. This band is provided with a central partition, *a a*, and at each end internally with screw-threads. The threads upon the outer end of the band engage with those upon the inner end of the box.

x x represent a disk which surrounds the axle, and which screws into the inner end of the band C. Between the disk and the partition *a* is a chamber, which is filled with cotton-yarn or some other suitable oil-packing.

e represents a circumferential flange or collar which surrounds the arm of the axle, and is placed between the partition *a* and the inner end of the box A, and is rigidly connected to the axle.

d is a set-screw for opening a passage for the admission of oil. This collar answers for a shoulder upon the arm of the axle, to prevent it from drawing out of the box, and may be slightly countersunk in a groove in said arm.

As the axle-arm does not reach to the end of the box, a quantity of oil may be stored away in the box and securely retained there by the packing in the chamber of the band.

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

The box A, axle B, and circumferential flange or collar *e*, connected thereto, in combination with the band C, having partition *a*, and the disk *x x*, having a packing-chamber between the two, and the screw *d*, all constructed as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of March, 1878.

ZADOCK HUGGINS.

Witnesses:

J. E. BABBITT,
JOHN M. HEATH.