

(No Model.)

J. RADDIN.

VEHICLE HUB AND AXLE COUPLING.

No. 334,049.

Patented Jan. 12, 1886.

Fig. 1.

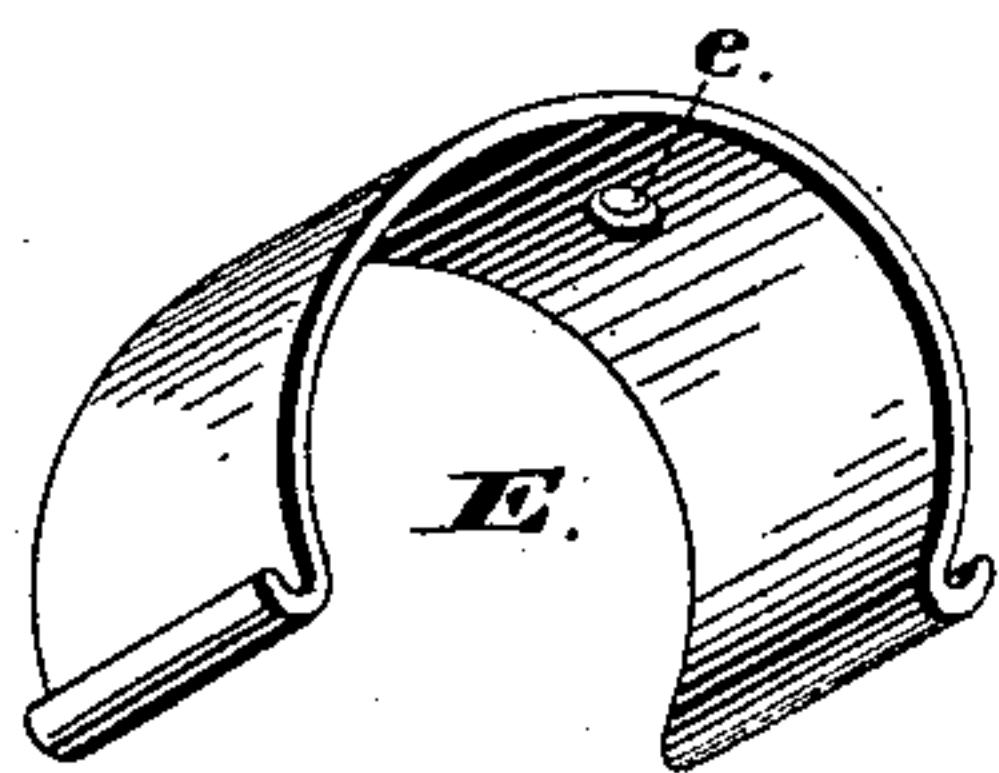


Fig. 2.

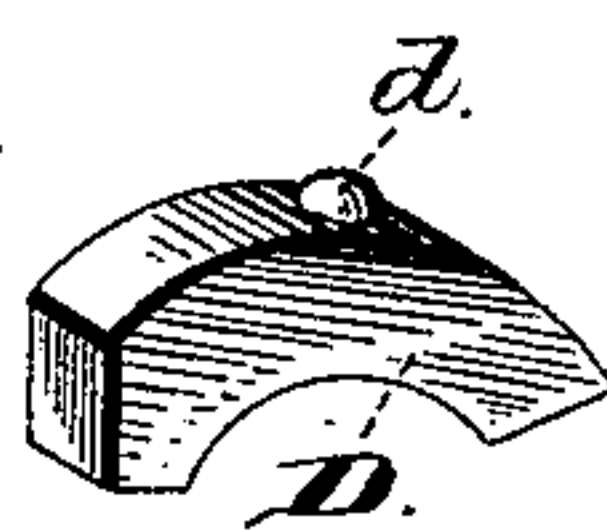
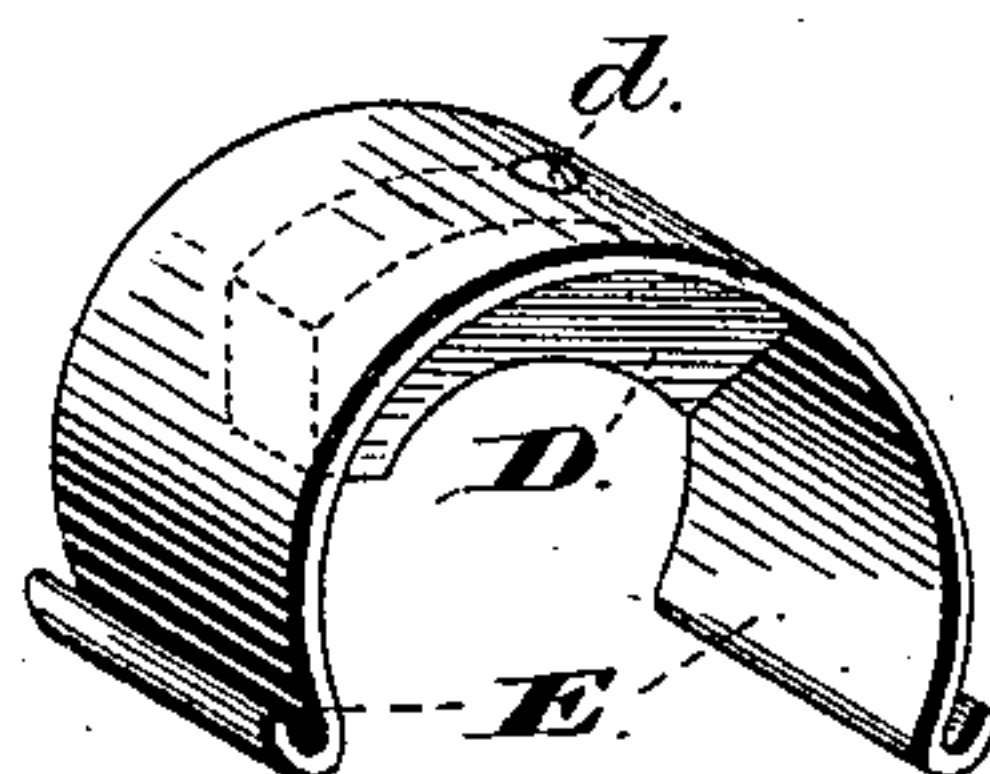


Fig. 3.

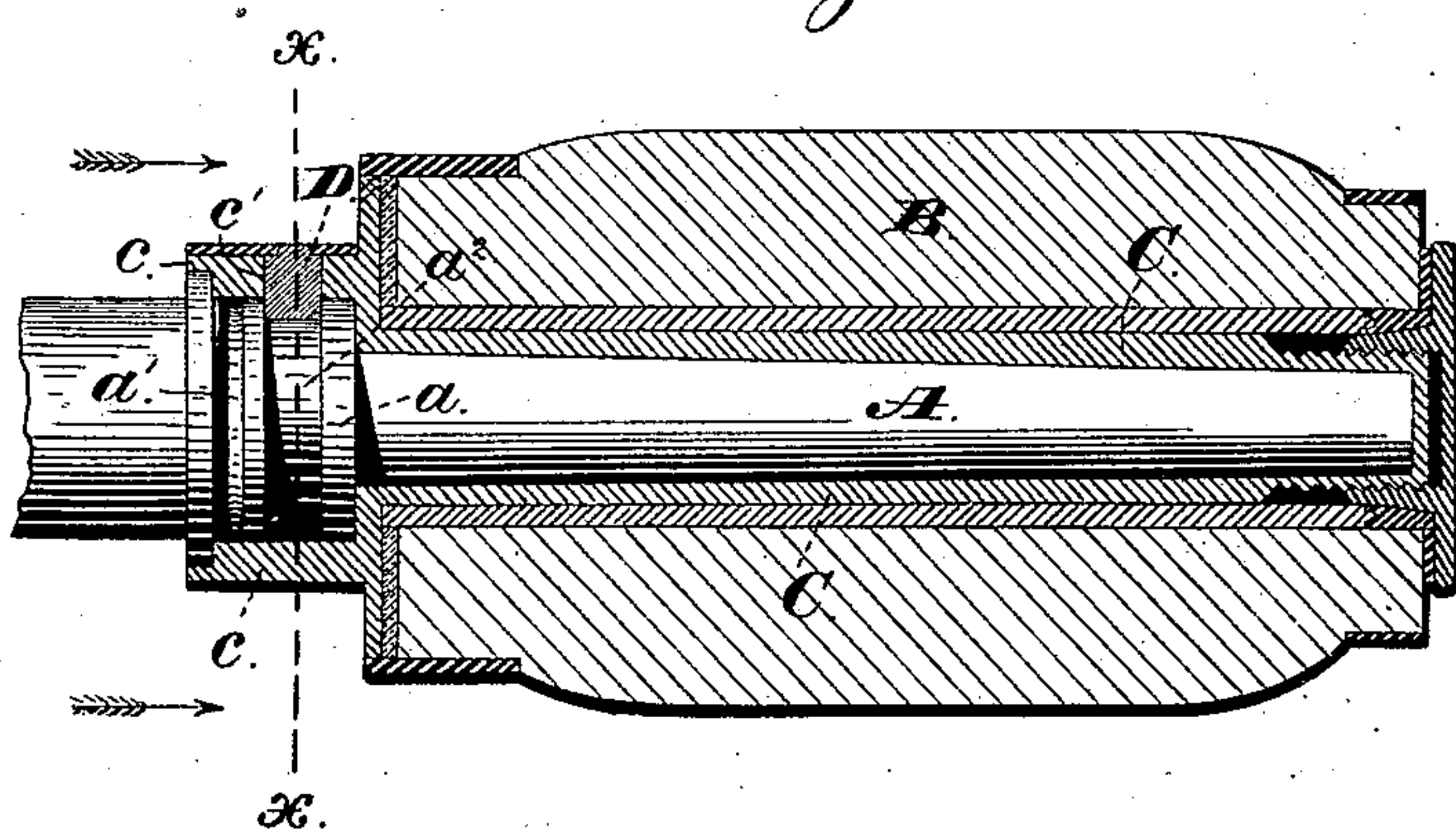
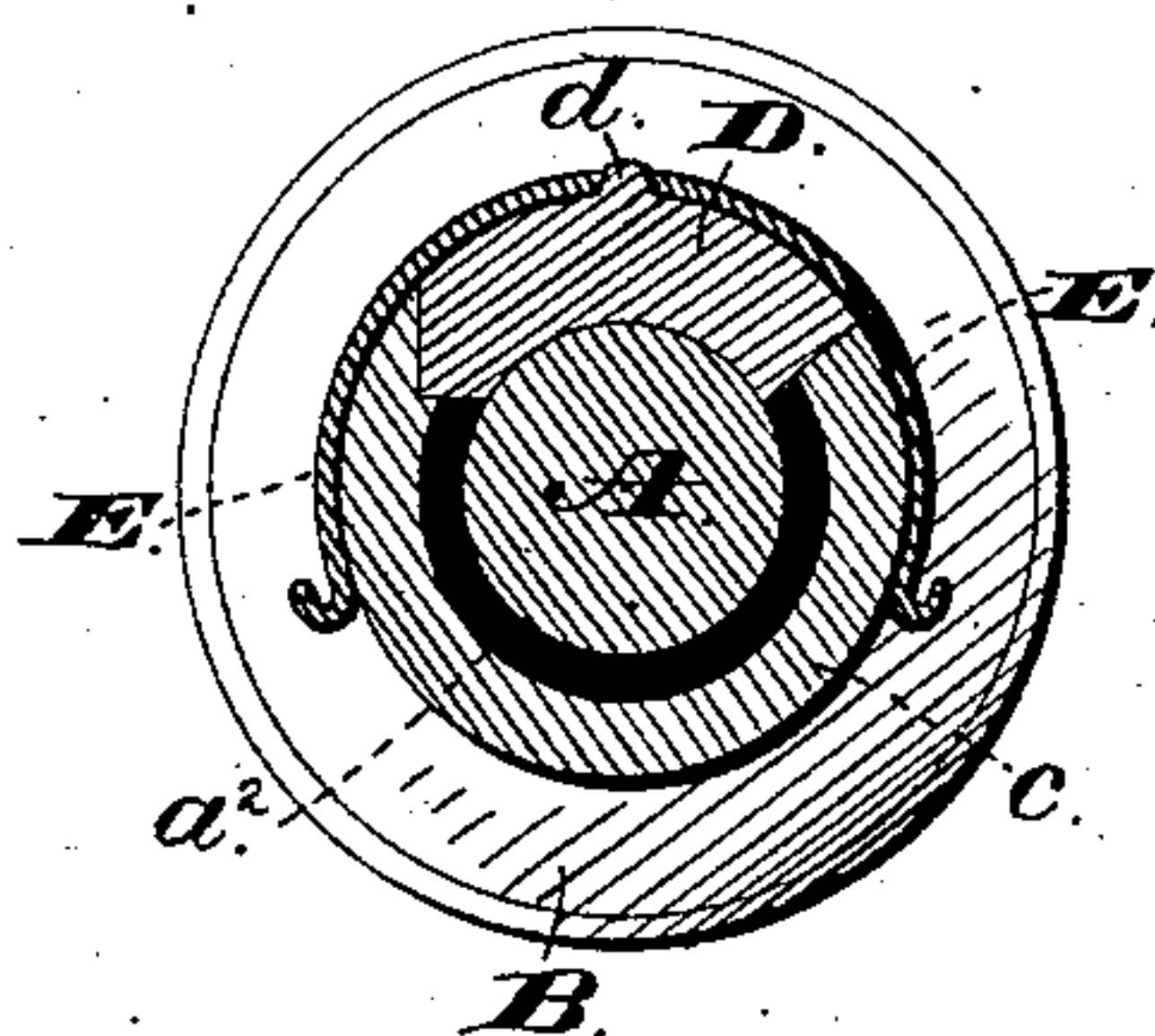


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN RADDIN, OF LYNN, MASSACHUSETTS.

VEHICLE-HUB AND AXLE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 334,049, dated January 12, 1886.

Application filed April 3, 1885. Serial No. 161,165. (No model.)

To all whom it may concern:

Be it known that I, JOHN RADDIN, of Lynn, in the county of Essex, State of Massachusetts, have invented certain new and useful
5 Improvements in Vehicle-Wheels and Axle-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

10 Figure 1 is a perspective view of my locking-block separated from its retaining-spring. Fig. 2 is a like view of the same united. Fig. 3 is a central longitudinal section of a wheel-hub and axle-arm combined by my device, and
15 Fig. 4 is a cross-section of the same upon line *x x* of Fig. 3.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable a
20 wheel to be securely locked in position upon its axle and to be easily and quickly removed from or replaced upon the same, to which end said invention consists in the construction and combination of parts, substantially as and for
25 the purpose hereinafter set forth.

In the carrying of my invention into effect I employ an axle-arm, A, which at its inner end has an enlargement to form a dust-collar, *a*, and adjacent to the same a second enlargement within which is formed a circumferential packing-groove, *a'*, and a deeper and wider
30 groove, *a''*, for use in locking the wheel of a hub in place.

The hub B is provided with an axle-skein, C, which has its outer end closed, and at its inner end is enlarged to fit over the enlarged
35 portion of the axle-arm A, and against the outer face of the dust-collar *a*.

Within the inward extended enlarged portion *c* of the axle-skein C is provided a radial opening, *c'*, which coincides with the groove *a''* of the axle-arm A, and corresponds in width to the width of the same. Into said opening is fitted a metal block, D, that closely
40 fills the same and loosely fills the portion of said groove immediately beneath, and operates to lock said axle-skein and its hub B in position lengthwise of said axle-arm without interference with their free rotation upon and

around the same. The outer face of the locking-block D corresponds to the curvature of the axle-skein C at such point, and is flush with the contiguous surface, and over the same is placed a spring-clip, E, which has a C shape in edge view, and is adapted to be
50 sprung over and to closely embrace the enlarged part *c* of said axle-skein, in which position it operates to hold said locking-block firmly in position, and to prevent accidental displacement. In order that the relative positions of
55 the locking-block D and spring-clip E may be maintained, a teat or lug, *d*, extends from the periphery of said block radially outward into a corresponding opening, *e*, in said clip, by which arrangement the latter is held in place
60 circumferentially and laterally, while free to be removed when desired.

The construction shown enables a wheel to be easily and quickly removed for the purpose of cleaning and oiling the axle-arm; or
65 the parts may be oiled without removal of the wheel by withdrawing the locking-block and inserting oil through the opening for the same.

If desired, two or more locking-blocks may be employed upon each wheel; but it is believed that but one will be required. The inward pressure of the spring-clip is sufficient to prevent displacement of parts; but, if desired, said clip may be fastened in place by means of screws, in which event the joint between the same and the axle-skein may be
70 packed to prevent the escape of oil.

Having thus described my invention, what I claim as new is—

In combination with the axle-arm A, provided with the circumferential groove *a''*, the axle-skein C, having the radial opening *c'*, the locking-block D, fitting into said opening and engaging with said groove, and the spring-clip E, adapted to embrace the enlarged part
85 *c* of said skein and to hold said block in place, substantially as and for the purpose set forth.

In testimony whereof I hereunto set my hand this 1st day of April, 1885.

JOHN RADDIN.

Witnesses:

CHAS. SPAULDING,
MATTHEW M. BLUNT.