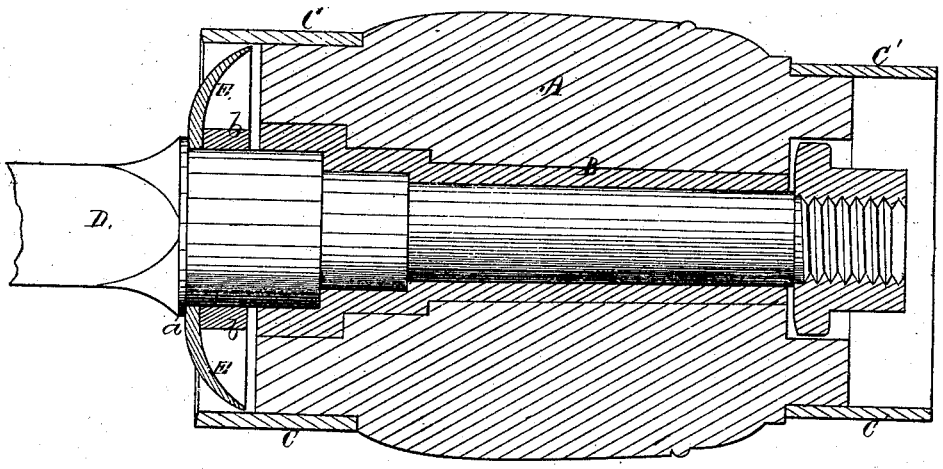
M. C. NAY.

DUST-GUARDS FOR CARRIAGE-WHEELS.

No. 169,915. Patented Nov. 16, 1875.



Witnesses.
Geo Gray
F. C. Hale

Moses C. Nay.
by his attorney.
F. P. Hale

UNITED STATES PATENT OFFICE.

MOSES C. NAY, OF EAST BOSTON, MASSACHUSETTS.

IMPROVEMENT IN DUST-GUARDS FOR CARRIAGE-WHEELS.

Specification forming part of Letters Patent No. **169,915**, dated November 16, 1875; application filed April 23, 1875.

To all whom it may concern:

Be it known that I, MOSES C. NAY, of East Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Dust-Guards for Carriage Wheel and Axle; 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 which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The accompanying drawing denotes a central and longitudinal section of an axle and the hub of a wheel having my invention applied thereto.

The object of my invention is to provide an effective means of preventing dust or sand from entering the inner end of the box of a wheel, and thus avoiding the injurious abrading action of the sand upon the box and journal as now experienced in carriages of the ordinary construction; and my invention consists in rigidly securing to the axle a circular metallic meniscus-shaped disk, of such diameter and so arranged thereon as to enter the hub-band and fit closely to the end of the hub, the same being as hereinafter fully described and claimed.

In the said drawing, A denotes the hub of a wheel, having a box, B, of the ordinary construction applied thereto. C C′ are the hub-bands, the same projecting a short distance beyond the ends of the hub. D is the axle, which is provided with a wheel-fastening nut and a shouldered journal of the ordinary construction. Beyond the journal part of the axle I form a shoulder, *a*, and on this portion of the axle I place concavo-convex or meniscus-shaped disk or guard, E, having a diameter corresponding with the internal diameter of the hub-band. This guard I affix to the axle rigidly, and against the shoulder *a* thereof, by means of an annular washer or ring, *b*, which is swaged on the axle and against the shoulder. This ring is arranged in close proximity to the end of the box when the journal is in the same. This guard E extends into the contiguous hub-band, and into as close proximity with the end of the hub as practicable without impinging against the same, the object of such being to make as tight a joint as possible, and allow the wheel or hub to rotate without friction against the same.

By making the guard with the convex outer surface the same tends to deflect outward any dust or sand that may fall thereon.

I am aware that hubs have been provided with caps screwed onto their inner ends, and serving to confine the wheels on the journals. I am also aware that boxes have been placed upon the axle so as to extend over and circumscribe the inner hub-bands. Therefore, I do not claim, broadly, a dust-guard irrespective of its construction and application.

I am also aware of the devices shown in Letters Patent Nos. 55,870 and 153,275 for preventing the admission of dust or grit to an axle.

Having described my invention, what I claim is—

In an axle and hub in which the axle and its journal are formed in one piece, the axle provided with a shoulder, *a*, in combination with a meniscus-shaped metallic guard, E, and a washer or ring, *b*, the said guard and washer being swaged on the axle, and the guard E extending and fitting in the chamber of the hub-band, in manner as shown and described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

MOSES C. NAY.

Witnesses:
F. P. HALE,
F. C. HALE.