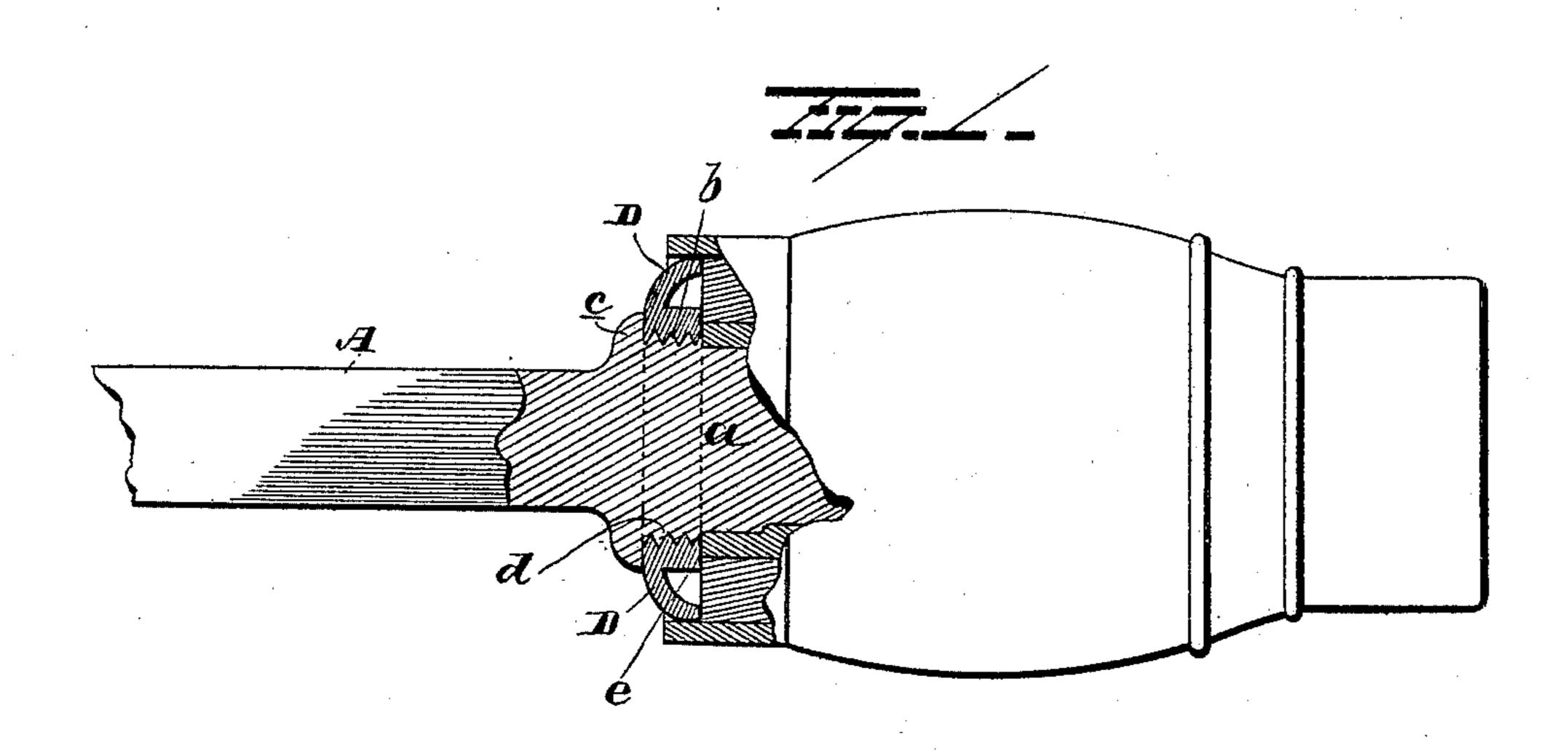
(No Model.)

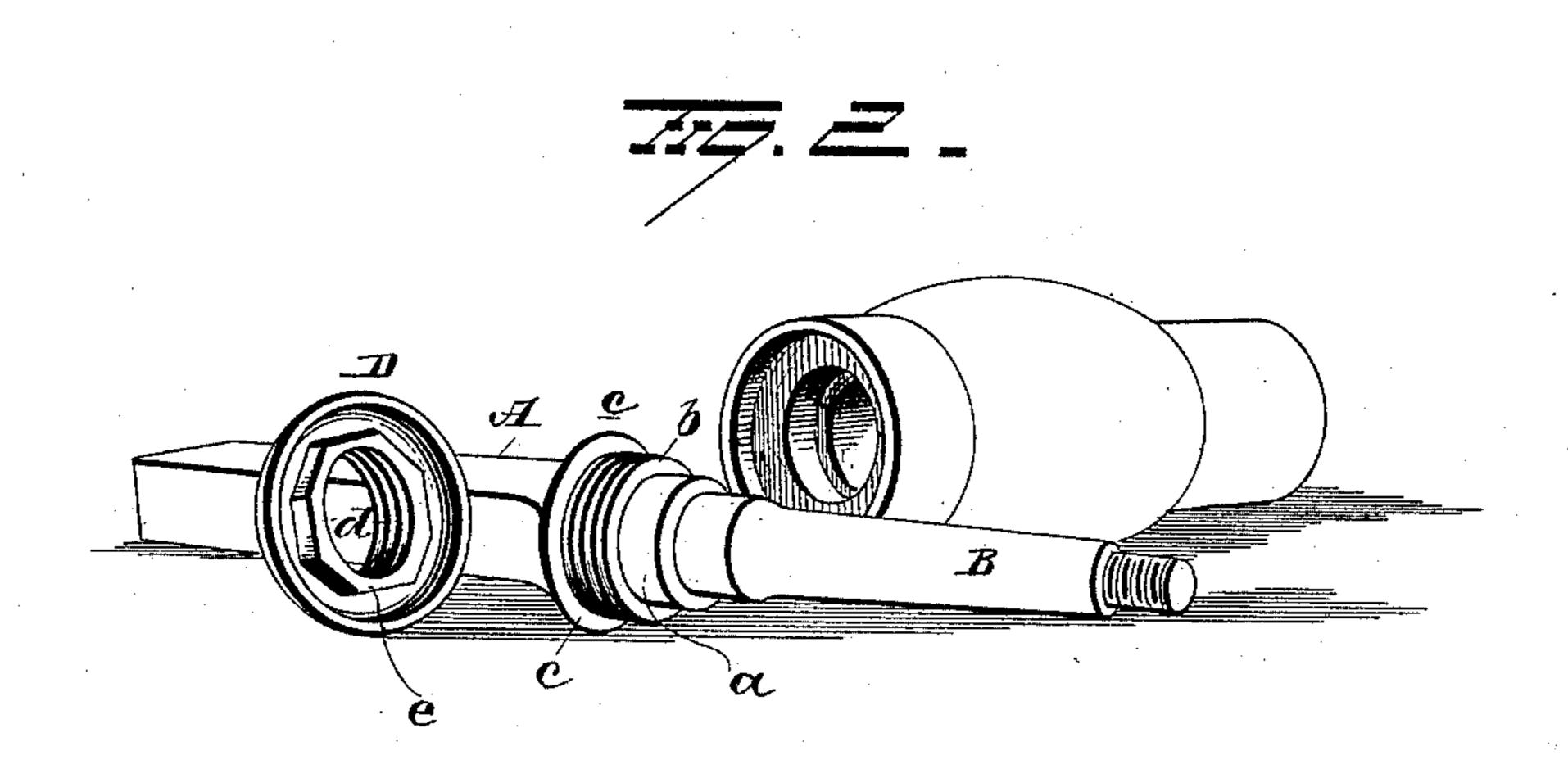
## J. T. RICHARDS & J. F. NEWELL.

DUST GUARD FOR VEHICLE HUBS.

No. 395,666.

Patented Jan. 1, 1889.





Witnesses. Ele Nottengham C.F. San John Richards John & neurle.

By their Attorney Language.

## United States Patent Office.

JOHN T. RICHARDS AND JOHN F. NEWELL, OF GARDINER, MAINE.

## DUST-GUARD FOR VEHICLE-HUBS.

SPECIFICATION forming part of Letters Patent No. 395,666, dated January 1, 1889.

Application filed April 11, 1888. Serial No. 270,288. (No model.)

To all whom it may concern:

Be it known that we, John T. Richards and John F. Newell, of Gardiner, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Dust-Guards for Vehicle-Hubs; and we do hereby 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.

Our invention relates to an improvement in dust-guards for vehicle-hubs.

Hitherto devices have been screwed upon axles to prevent particles of dust and dirt from working their way into the hub and onto the spindle; but difficulties have been encountered in finding a means for quickly securing these guards in their place and in preventing their accidental displacement.

The object of our present invention is to provide a dust-guard with means whereby it may be tightly and quickly screwed in its place upon the axle or readily removed therefrom.

With this end in view our invention consists in certain features of construction and combination of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of a hub and part of the axle, and Fig. 2 shows the hub, axle, and dust-guard detached.

A represents the end of an axle, terminating in the spindle B. The spindle has the usual shoulder, a, formed thereon next to the portion joined to the axle proper. The rear end of this shoulder portion is provided with a screw-thread, b, and back of the thread, or between the latter and the axle proper, the hub-band c is formed integral with the spindle.

D represents a removable cup or ring, which we designate the "dust-guard." This ring is preferably rounded or convex on its outer surface to give it a finish, and around

the central opening, d, integral with the shell of the ring and extending flush with the inner face of the guard, a gripping-flange, e, having a polygonal outer edge, is formed, this portion being adapted to receive a wrench, 50 whereby the guard is turned like an ordinary nut when it is to be turned on or off. When thus attached, this dust-guard forms, essentially, a part of the spindle and axle, so that when once screwed firmly upon its scat it need 55 not be removed again. When the hub is on and all the parts are assembled, the rear of the hub is practically closed, as shown in Fig. 1, the flange of the hub extending over the edges of the guard.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of our invention; hence we do not wish to limit ourselves to the 65 particular construction herein set forth; but,

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A dust-guard consisting of a cup or ring 70 having a polygonal gripping-flange in its interior, substantially as set forth.

2. The combination, with a hub, an axle, and a shouldered spindle, the shoulder of the latter having a screw-thread thereon and an 75 integral hub-band in close proximity thereto, of a removable cupped dust-guard, said guard having a screw-threaded opening in the center, and a polygonal gripping-flange integral with the interior of the guard, substantially 80 as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JOHN T. RICHARDS. JOHN F. NEWELL.

Witnesses:

A. C. PAGE, A. E. HARMON.