



# UNITED STATES PATENT OFFICE.

FREDERIK KRAMER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF  
TO LOUIS FRIEDERICH, OF SAME PLACE.

## HUB-CAP.

SPECIFICATION forming part of Letters Patent No. 551,290, dated December 10, 1895.

Application filed November 21, 1894. Serial No. 529,503. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERIK KRAMER, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in a Combined Band and Cap for Wheel-Hubs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a combined band and cap for wheel-hubs; and it consists in certain novel features of construction that will be hereinafter described and claimed.

The object of my invention is to construct an improved combined band and cap for wheel-hubs that when applied to the wheel-hub will present a neat and pleasing appearance, and also entirely exclude dust, sand, and other foreign substances that are injurious or detrimental to the working of the hub upon the axle.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is an elevation of the inside of the dust-cap, of which I make use in carrying out my invention.

In the construction of the device as shown, 1 indicates a cylindrical thimble open at both ends, and which is adapted to be secured directly upon the outer end of the wheel-hub. On the exterior and the rear edge of this thimble 1 is formed an integral flange 2. Diametrically arranged on the inside of the thimble 1, and adjacent the edge opposite the one on which the flange 2 is formed, are integral ears 3, the same being provided with screw-threaded apertures 4.

5 indicates a dust-cap, the same being in the form of a circular disk and provided with the concentrically-arranged projecting portion 6, the outer edge of which is milled, as indicated by 7. The edge 8 of the dust-cap is also milled.

An integral flange 9 is formed on the inner face of the dust-cap 5 and extends in an opposite direction from the projecting portion 6. Just inside this integral flange 9 and in the face of the dust-cap 5 is formed an annular groove or depression 10, the width of which

corresponds to the thickness of the forward edge of the thimble 1.

Oppositely arranged and passing through the dust-cap 5 are apertures 11, the same being countersunk and adapted to receive screws 12 when said cap is in position upon the thimble 1. Said screws 12 engage in the screw-threaded apertures 4 in the ears 3, as apertures 4 register with the apertures 11 when the dust-cap is properly arranged.

In the practical use of my invention, the thimble 1 is securely placed upon the outer end of the wheel-hub in the usual manner. The dust-cap 5 is then positioned upon the thimble 1, the edge of said thimble engaging in the annular groove or depression 10 in the edge of said dust-cap, and the apertures 11 in the dust-cap registering with the apertures 4 in the ears 3 that are formed integral with the thimble 1. Ordinary screws, such as 12, are now passed through the coinciding apertures, thus firmly and rigidly securing the dust-cap to the thimble 1.

By providing the flange 9 on the dust-cap and the annular groove or depression 10 in which the edge of the thimble 1 is located, a perfectly dust and water proof joint is made.

When it is desired to gain access to the nut upon the end of the axle, the screws 12 are withdrawn from the apertures 4 in the ears 3 and the dust-cap removed from its position upon the thimble. This operation, as may be plainly seen, is simple and expeditious.

Wheel-hubs provided with my combined band and cap present a very neat and pleasing appearance, the nuts upon the axle cannot possibly become disengaged and lost, dust, sand, or water cannot enter between the hub and the axle from this end of the hub, and a combined band and cap thus formed and constructed possesses superior advantages in point of simplicity, durability, and general efficiency.

What I claim is—

The improved band and cap for wheel-hubs comprising the thimble 1 having an integral flange 2 on its rear edge, diametrically opposite integral ears 3 formed on the interior of said thimble adjacent the edge which is opposite the flange 2, said ears having screw-threaded

apertures 4, a dust-cap provided with the  
 concentric projecting portion 6, the outer edge  
 of which is milled, an integral flange 9 formed  
 on the inner face of said dust-cap and extend-  
 5 ing in opposite directions from the projecting  
 portion 6, said dust-cap having an annular  
 groove 10 in its face just inside of said flange  
 9, the width of said groove corresponding to  
 10 the thickness of the forward edge of said  
 thimble, said dust-cap having diametrically

opposite countersunk apertures 11, and screws  
 12 engaging said apertures and the threaded  
 apertures 4 of the said ears, substantially as  
 herein specified.

In testimony whereof I affix my signature 15  
 in presence of two witnesses.

FREDERIK KRAMER.

Witnesses:

E. E. LONGAN,

JNO. C. HIGDON.