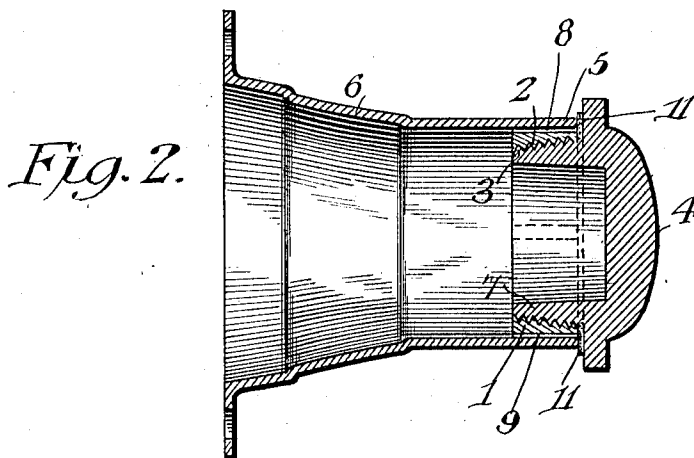
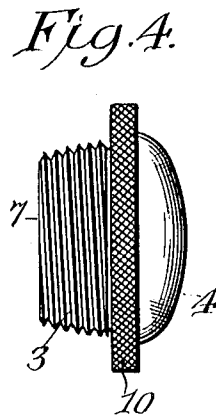
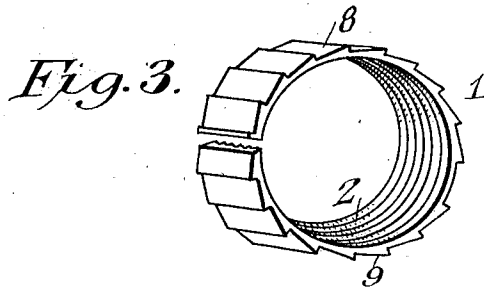
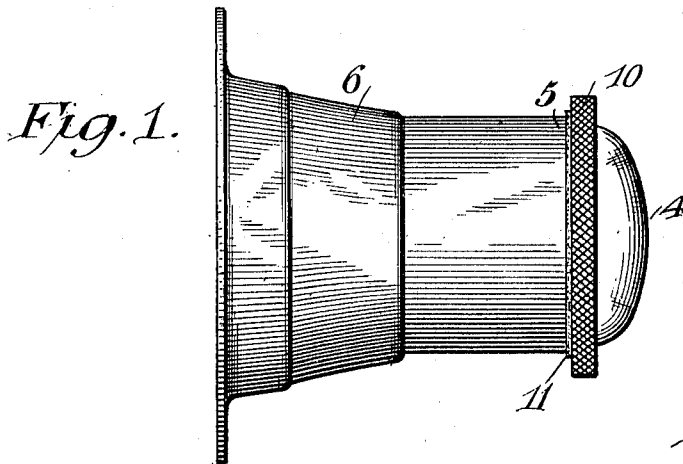


T. M. STUTZMAN.
DUST CAP FOR VEHICLE WHEELS.
APPLICATION FILED APR. 6, 1911.

1,039,331.

Patented Sept. 24, 1912.



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Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS M. STUTZMAN, OF SEDALIA, MISSOURI.

DUST-CAP FOR VEHICLE-WHEELS.

1,039,331.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed April 6, 1911. Serial No. 619,432.

To all whom it may concern:

Be it known that I, THOMAS M. STUTZMAN, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented a new and useful Dust-Cap for Vehicle-Wheels, of which the following is a specification.

The invention relates to improvements in dust caps for vehicle wheels.

The object of the present invention is to improve the construction of dust caps, and to provide a simple, inexpensive and efficient dust cap, designed for use on the hubs of the wheels of buggies, carriages, and analogous vehicles, and adapted to add to the appearance or finish of the same, and capable of effectually excluding dust and dirt and of preventing loss of oil or other lubricant.

A further object of the invention is to provide a dust cap, adapted to be quickly applied to and readily removed from the hub of an ordinary vehicle wheel, and which when mounted thereon will not slip, and which will obviate the necessity of threading the hub band.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims here-to appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a side elevation of a portion of a hub provided with a dust cap, constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the split ring. Fig. 4 is a side elevation of the cap.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

In the accompanying drawing in which is illustrated the preferred embodiment of the invention, 1 designates a split ring cross sectionally tapered, as clearly illustrated in Fig. 2 of the drawing, and provided with interior screw threads 2, adapted to be engaged by exterior screw threads 3 of a cap 4. The ring 1, which is constructed of suitable resilient material, is split to permit it

to expand and contract to enable it to be readily introduced into and removed from the outer end 5 of an outer band 6 of a hub. The threads 3 of the cap 4 are formed on an inner tapered portion 7 of the cap, which is preferably hollow, as shown. The tapered portion 7 is adapted to expand the split ring within the outer end of the hub, and the said ring is provided with opposite sets of teeth 8 and 9, shouldered in opposite directions, so as to engage the interior of the outer band 6 of the hub, whereby the split ring and the cap are effectually prevented from slipping. When the cap is screwed into the split ring, the inner tapered portion 7 is forced through the tapered ring 1, which is thereby expanded and when the cap is unscrewed the band is permitted to contract and is thereby released from its engagement with the hub. When it is desired to remove the band from the hub, the cap is unscrewed sufficiently to loosen the ring and is pulled outward, so as to remove both the cap and the ring. The split ring is adapted to contract sufficiently to permit it to be readily introduced into the hub, and the contraction and expansion of the ring will enable it to adjust itself to any variations in the interior diameter of the outer ends of hubs.

The cap is provided at an intermediate point with a milled flange 10, and a gasket 11 of suitable material is arranged on the inner threaded portion of the cap and is interposed between the flange 10 and the outer end of the hub to form a water tight joint, and thereby effectually prevent loss of oil or the entrance of dust at the outer end of the hub.

So far as I am aware, it is new to connect a dust cap to a hub band by means of a retaining device which is of such size and shape as to adapt it to be arranged wholly within the outer end of the hub band, said retaining device consisting of a part or member which frictionally engages the interior wall of the hub band, and is forced into such engagement or released therefrom by screwing on or unscrewing the cap itself. It will be understood that when the outer end of the hub band is tapered, the outer periphery of the ring should be correspondingly tapered.

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

1. A device of the class described includ-

ing a split ring provided with interior screw threads and exterior teeth and adapted to be arranged wholly within the outer end of a hub band, and a cap for closing the outer
5 end of the band, said cap being provided with a threaded portion to engage the threads of the ring and adapted to expand the same into engagement with the band when screwed inwardly and releasing the
10 ring from such engagement when screwed outwardly.

2. A device of the class described including a split ring tapered in cross section and provided with interior screw threads and
15 adapted to be arranged wholly within the outer end of a hub band, and a cap for closing the outer end of the band, said cap being provided with a tapered threaded portion to engage the threads of the ring and adapted
20 when screwed inwardly to expand the same within the band and releasing the split ring from such engagement when screwed out-

wardly, said ring being provided on its periphery with opposite series of reversely shouldered teeth for engaging the interior 25 of the band.

3. In combination with the hub band, a cap for closing the outer end of the hub band, said cap being provided with a threaded portion, and a retaining device for the 30 cap arranged wholly within the hub band and composed of a single part which frictionally engages the interior wall of the band and is forced into such engagement or released therefrom by screwing or unscrew- 35 ing the cap.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THOMAS M. STUTZMAN.

Witnesses:

G. L. HALL,
H. C. TAYLOR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
