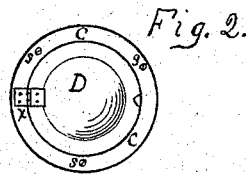
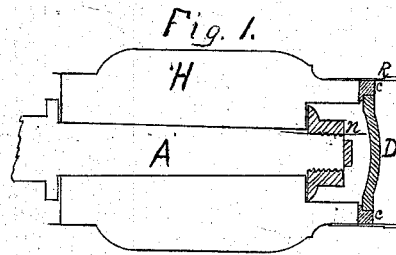


P. HEOTER & R. VIETOR.

Improvement in the Modes of Attaching Caps to Hubs.

No. 115,316.

Patented May 30, 1871.



Witnesses.

*C. F. Smith*  
*Edward Taggart*

Inventor.

*Peter Heoter.*  
*Rudolph Vietor*

# UNITED STATES PATENT OFFICE.

PETER HEOTER AND RUDOLPH VIETOR, OF GRAND RAPIDS, MICHIGAN.

## IMPROVEMENT IN THE MODES OF ATTACHING CAPS TO HUBS.

Specification forming part of Letters Patent No. 115,316, dated May 30, 1871; antedated May 23, 1871.

*To all whom it may concern:*

Be it known that we, PETER HEOTER and RUDOLPH VIETOR, of the city of Grand Rapids, county of Kent and State of Michigan, have invented certain new and useful Improvements in Hub-Caps for Carriages; and we do hereby declare that the following is a full, clear, and sufficient description of our invention, reference being had to the accompanying drawing and the letters of reference marked thereon, and the same are made a part of this specification.

In the drawing, Figure 1 represents a sectional view of a carriage-hub to which our invention is attached, showing also a sectional view of the invention. Fig. 2 of the drawing is an end view of the hub-cap as it appears when applied to the hub ready for use.

In Fig. 1, H represents the hub cut through the center lengthwise; A is the axle-tree of the carriage; *n*, the nut designed to secure the wheel upon the axle-tree; R is the ordinary metallic band used upon carriage-hubs; C C are sectional views of our invention as it appears when applied to the hub; and D, in Fig. 1, a sectional view of the cover or door of the cap. In Fig. 2, *c c* represents the cap proper, which is a ring or washer composed of any suitable material. This part is rabbeted, as shown in the sectional views *c c* in Fig. 1, in order to allow the cover to fit closely when it is shut. D is the cover or door, attached to the part *c c* by a hinge, as shown in Fig. 2 by *x*. The door or cover is provided with

a spring-catch or some similar device in order to keep it securely closed when the carriage is in use. The cap is secured to the end of the hub and on the inner side of the band R, by means of screws or nails passing through the rabbeted ring or washer *c c* into the end of the hub. The screws or nails are shown in Fig. 2 by *s s s*.

Our invention is designed by us to be applied to ordinary wagons, but may be applied to all kinds of wheeled vehicles. It may be constructed of cast or malleable iron, or any other suitable material, and applied to the hubs of carriages with but little expense. It is a protection both to the hub and the axle-tree. It protects and preserves the hub by excluding moisture, and the axle-tree by excluding dirt, mud, and other substances which are liable to be introduced into the hub.

Having described our invention, what we claim to have invented, and desire to secure by Letters Patent, is—

The improved hub-cap, composed of the metallic rabbeted ring or washer *c c*, provided with the hinged cover D, to be applied to the outer end of a carriage-hub, when constructed substantially as and for the purposes above set forth.

PETER HEOTER.  
RUDOLPH VIETOR.

Witnesses:

C. F. SMITH,  
EDWARD TAGGART.