

No. 706,530.

Patented Aug. 12, 1902.

S. T. COPENHAVER.  
DUST CAP FOR HUBS.  
(Application filed Mar. 26, 1902.)

(No Model.)

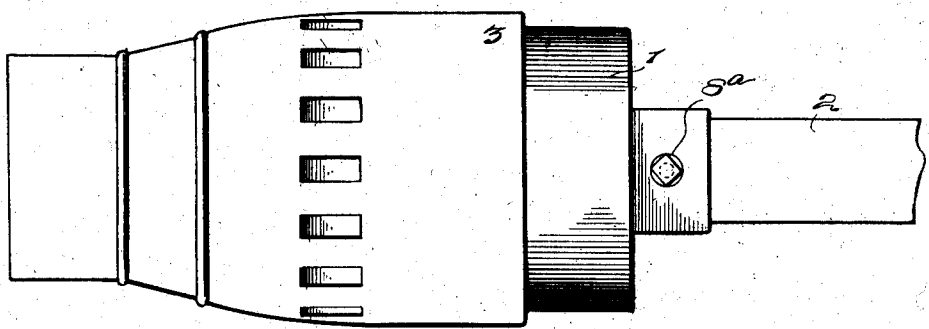


Fig. 1.

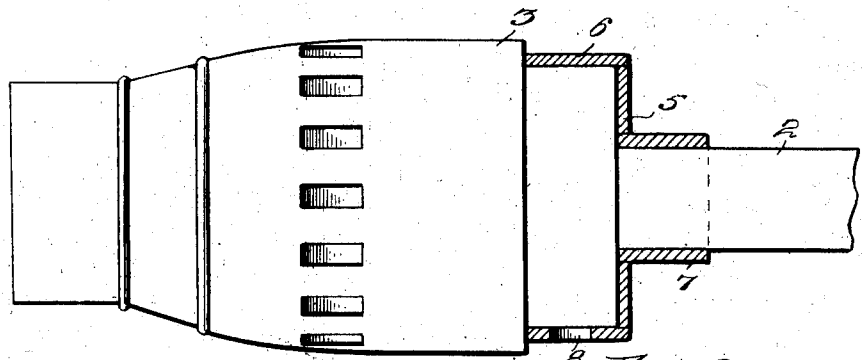


Fig. 2.

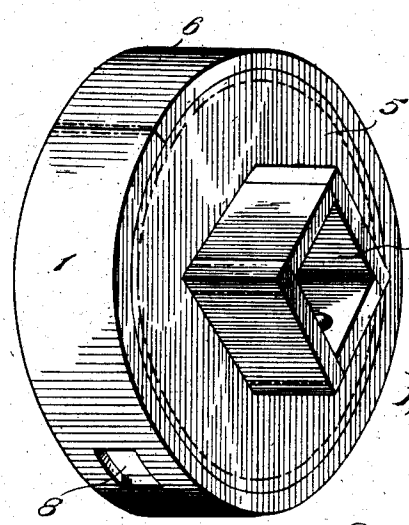


Fig. 3.

Witnesses  
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# UNITED STATES PATENT OFFICE.

SAMUEL TAYLOR COPENHAVER, OF LOSANTVILLE, INDIANA.

## DUST-CAP FOR HUBS.

SPECIFICATION forming part of Letters Patent No. 706,530, dated August 12, 1902.

Application filed March 26, 1902. Serial No. 100,100. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL TAYLOR COPENHAVER, a citizen of the United States, residing at Losantville, in the county of Randolph and State of Indiana, have invented a new and useful Dust-Cap for Hubs, of which the following is a specification.

The invention relates to improvements in dust-caps for hubs.

10 The object of the present invention is to improve the construction of dust-caps for hubs and to provide a simple, inexpensive, and efficient cap designed to be mounted on an axle adjacent to the inner end of the spindle to cover the inner end of the hub to exclude sand and dust from the bearing to obviate the inconvenience of frequent lubrication of the axles of a vehicle, scraper, or other machine.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

25 In the drawings, Figure 1 is a side elevation of a hub and a portion of an axle provided with a dust-cap constructed in accordance with this invention. Fig. 2 is a similar view, the dust-cap being in section. Fig. 3 is a detail perspective view of the cap.

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

1 designates a dust-cap designed to be mounted on an axle 2 at the inner end of a hub 3, as illustrated in Figs. 1 and 2 of the accompanying drawings, to exclude sand and dust from the bearing to obviate the necessity of frequently removing the wheel and lubricating the axle. The dust-cap, which is preferably constructed of heavy leather, may be made of any other suitable material, and it is composed of a disk 5, provided at its periphery with an annular flange 6 and having a centrally-arranged sleeve 7 conforming to the configuration of the axle. The disk fits against the inner end of or is arranged adjacent to the hub, and the annular flange extends over the inner band of the hub, and the inner end of the hub is completely closed by the cap, whereby sand and dust are excluded from the bearing. The annular flange may be slightly tapered to secure a snug fit, and it is provided at its bottom with

an opening 8 to permit the escape of any sand or dust which may work between the flange and the hub.

The disk is provided with a central opening conforming to the configuration of the axle, and the sleeve, which extends outward from the disk in the opposite direction from the flange, receives and conforms to the configuration of the adjacent portion of the axle, and although it is shown square in the accompanying drawings, yet it will be readily apparent that it may be of any other configuration to conform to the shape of the axle to which the cap is applied.

The sleeve may be secured to the axle by means of a pin 8 or any other suitable fastening device, and the cap may be applied to the hubs of vehicles and to the hubs of wheeled scrapers and various other implements and machines which require frequent lubrication unless the bearings be protected.

It will be seen that the cap is exceedingly simple and inexpensive in construction, that it forms an efficient dust-guard for the inner end of the hub of a wheel, and that it will obviate the necessity of frequently lubricating the axle.

The parts of the dust-cap when constructed of leather will be preferably stitched together; but they may be secured in any other suitable manner, and various other materials may be employed in the construction of the cap.

What I claim is—

The combination with an axle and a hub, of a dust or sand cap comprising a polygonal sleeve conforming to the configuration of the axle and provided with means for securing it to the same, a disk provided with a central opening and secured to the outer end of the sleeve and fitted against the inner end of the hub and closing the same, and an annular flange extending from the periphery of the disk and fitting over the sand-band or inner end band of the hub, substantially as described.

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

SAMUEL TAYLOR COPENHAVER.

Witnesses:

CHAS. A. COLE,  
L. P. HATCH.