A. V. HOLCOMB.
Vehicle-Wheel Hub.

No. 212,934 **Patented Mar. 4, 1879.**

Fig. 1.

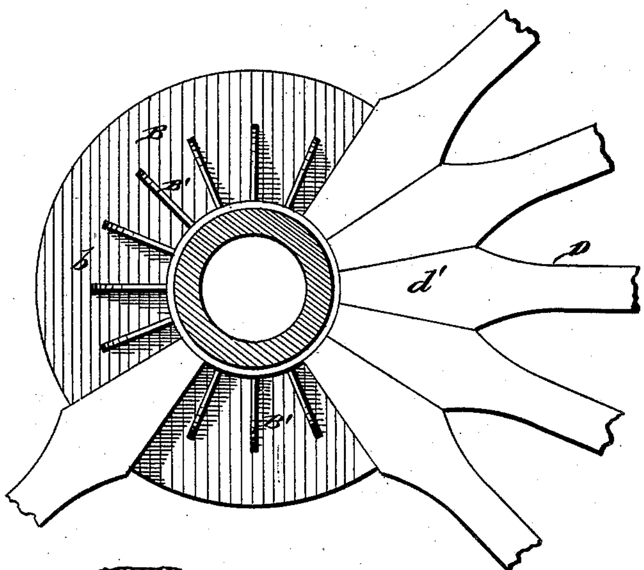


Fig. 2.

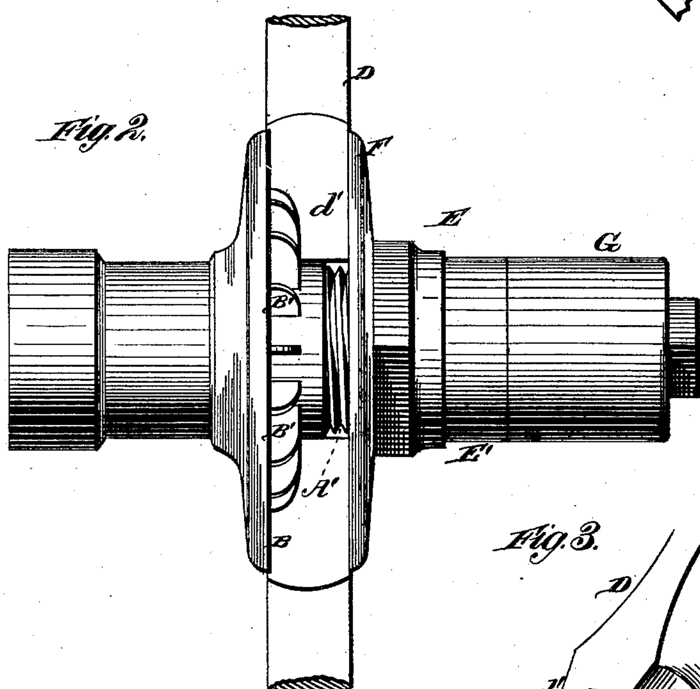
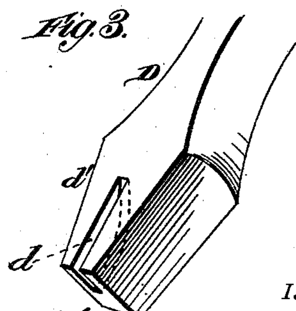


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

ALMON V. HOLCOMB, OF APPLETON, WISCONSIN.

IMPROVEMENT IN VEHICLE-WHEEL HUBS.

Specification forming part of Letters Patent No. **212,934**, dated March 4, 1879; application filed February 11, 1879.

To all whom it may concern:

Be it known that I, ALMON V. HOLCOMB, of the city of Appleton, in the county of Outagamie and State of Wisconsin, have invented certain new and useful Improvements in Wagon-Hubs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a transverse section; Fig. 2, a side elevation, and Fig. 3 a detail.

My invention relates to hubs for vehicle-wheels; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth.

In carrying out my invention I employ two cast portions, which I will designate as the "outer" and "inner" portions, both having an annular flange at right angles with the longitudinal plane of such portions, which flanges receive and bind the spokes therein, as will be more fully hereinafter explained.

The inner portion consists of a hollow shank, which receives the iron axle of the vehicle, the annular flange being formed at or near the center. Cast in one piece with this shank and flange are radial lugs, which extend from the central body of the shank outward along the outer face of the inner flange, the said lugs being received into slots in the ends of the spoke-tenons, as shown. The shank, from near the center outward, is provided with a screw-thread, which operates within the female-threaded portion of the outer portion, which has an annular flange, similar to the flange on the inner portion, but facing in the opposite direction. This outer portion is provided with a wrench-bearing, by means of which it is forced up against the spoke-tenons, holding them firmly between the flanges. The threaded shank protrudes beyond the outer portion, and is adapted to receive a screw-cap, which covers the securing-nut on the end of the axle, and forms a neat, finished appearance to the hub.

My invention is designed as an improvement upon that class of hubs in which the spokes are driven in by force between two fixed flanges, and radial lugs operate in slots in the spoke-tenons; but in such construction great nicety is necessary in forming such spoke-tenons, as a slight variation would render the spokes incapable of being driven if too large, and having no binding or holding effect if too small. To avoid these and other evils I make one flange adjustable by the great power of the screw-thread, and the spokes being carefully placed in their proper relative places, this flange is forced against the tenons, and forms an efficient holding device for the spokes.

I attach importance to placing the cap upon the same threaded shank upon which the outer portion operates, thus acting as a follower to the said outer portion, holding it secure against displacement.

I am aware that it is not broadly new to bind spoke-tenons between adjustable flanges; nor is it new, broadly, to have the radial lugs; and such devices, of themselves, are not sought to be covered, broadly, in this application.

Referring to the drawings, A represents the inner portion of my improved hub, having a hollow shank, as shown, having a threaded portion, A′, and an annular flange, B. B′ represents radial lugs, extending outward from the central body of the shank, and along the outer face, *b*, of the flange B, and these lugs operate in slots *d* in the tenon *d′* of the spoke D. The inner portion, A A′, flange B *b*, and radial lugs are cast in one piece, and form the inner part of the hub.

E represents the outer portion, having hollow shank E′, with female thread, and the annular flange F, as shown.

G represents the cap, having female thread, and it is adapted to operate upon the threaded end of the shank A′, and serves as a follower to adjustable portion E.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a metal hub, the combination of the inner portion, A, having threaded shank A′, flange B *b*, and radial lugs B′, with the outer portion E, having threaded shank E′, wrench-bearing, and flange F, and with the threaded cap G, as and for the purpose set forth.

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

ALMON V. HOLCOMB.

In presence of—

D. C. BABCOCK,

JEROME BACON.