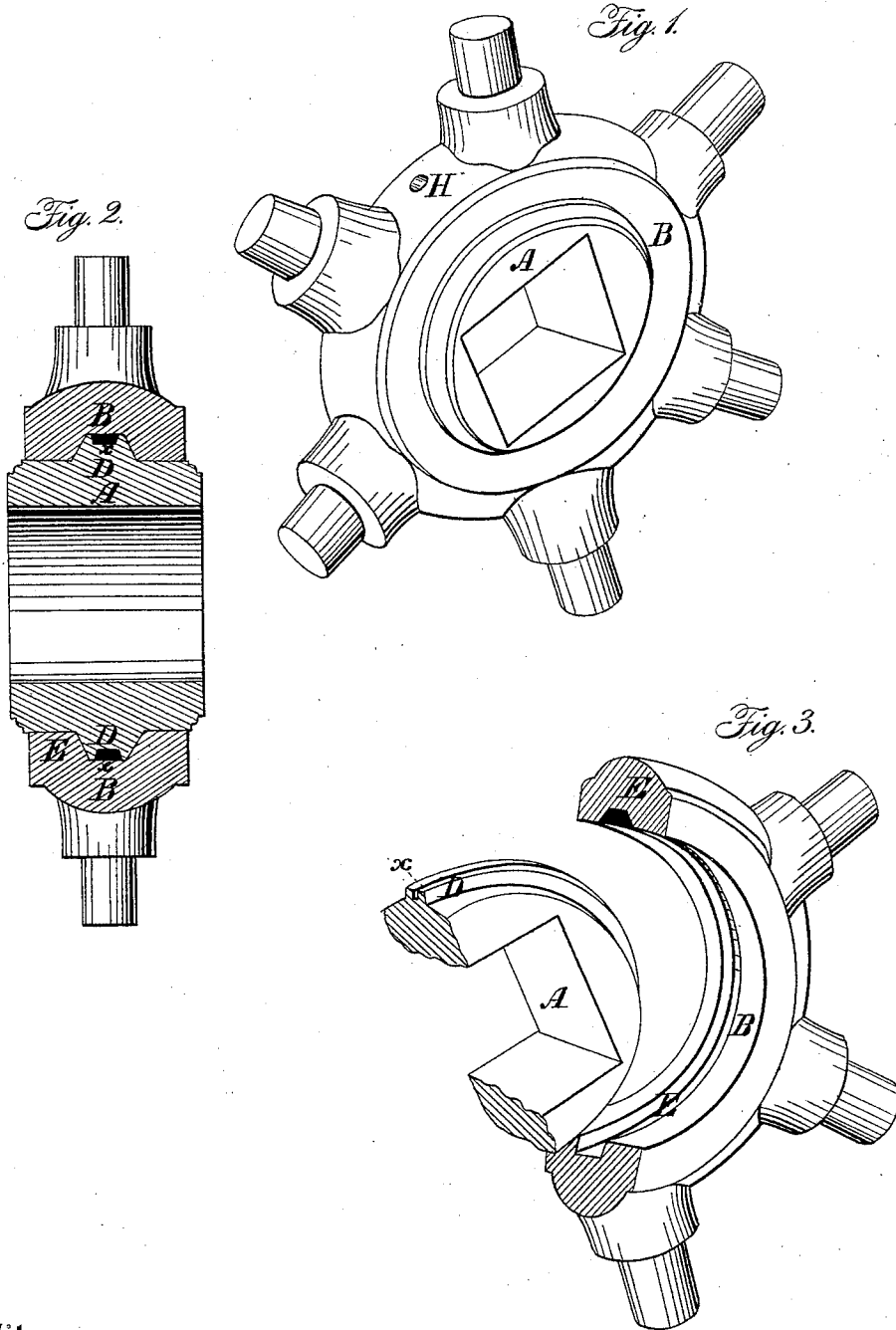


A. HUSTON.

Hub.

No. 58,647.

Patented Oct. 9, 1866.



Witnesses:

*C. G. Hall*  
*F. Wiley*

Inventor:

*Allen Houston*

# UNITED STATES PATENT OFFICE.

ALLEN HUSTON, OF CINCINNATI, OHIO.

## IMPROVEMENT IN HUBS.

Specification forming part of Letters Patent No. 58,647, dated October 9, 1866.

*To all whom it may concern:*

Be it known that I, ALLEN HUSTON, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Hubs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings; making a part of this specification, in which—

Figure 1 is a perspective view of a hub containing my improvement. Fig. 2 is a sectional view of the hub, showing the arrangement of the parts. Fig. 3 is a perspective view of a portion of the parts of which my improved hub is composed.

My improvement consists in making a metallic hub in two parts, one of which is cast around or within the other, so that they may be inseparably connected, while the outer portion is capable of motion about the inner portion.

In the drawings, A represents the inner portion of the hub, through the square hole in the center of which a stationary axle passes. This portion, therefore, does not revolve.

B represents the outer portion of the hub, containing the sockets for the spokes. This portion revolves freely about the part A, and carries with it the spokes, felloes, and tire.

The inner portion, A, is cast with a rib, D, upon it, which rib passes around the center of

the periphery. The periphery of the rim is grooved, as shown at X, for the purpose of oiling the joint.

The outer portion, B, is cast with a groove, E, in the center of the inner circumference. This groove is of a size sufficient to receive the rib D, so that the two pieces, while freely revolving one about or within the other, shall be inseparable. Oil is introduced through the aperture H.

This hub is made by casting the inner portion, A, and then casting the outer portion, B, around it, the circumference of the part A forming part of the mold; or the operation may be reversed, B being cast first and used as a mold for A. The sand in the groove X of the rib D is removed through the oil-hole H.

It is obvious that the rib may be upon the part B and the flange upon the part A, or vice versa, as described.

What I claim as my invention, and desire to secure by Letters Patent, is—

Casting a hub in two concentric parts, one about or within the other, so that while the parts are inseparable each may revolve freely in relation to the other, substantially as described.

ALLEN HUSTON.

Witnesses:

E. G. HALL,  
B. F. RILEY.