(No Model.)

J. M. SWEET.

WHEEL HUB.

No. 345,006. Patented July 6, 1886.

Fig. 1.

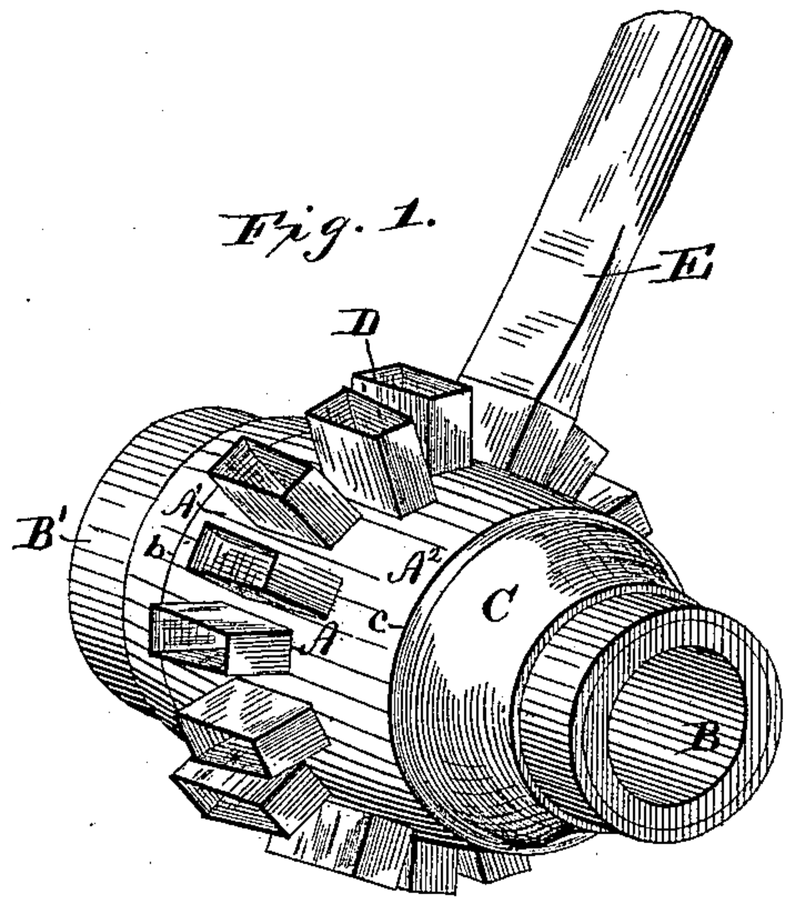


Fig. 2.

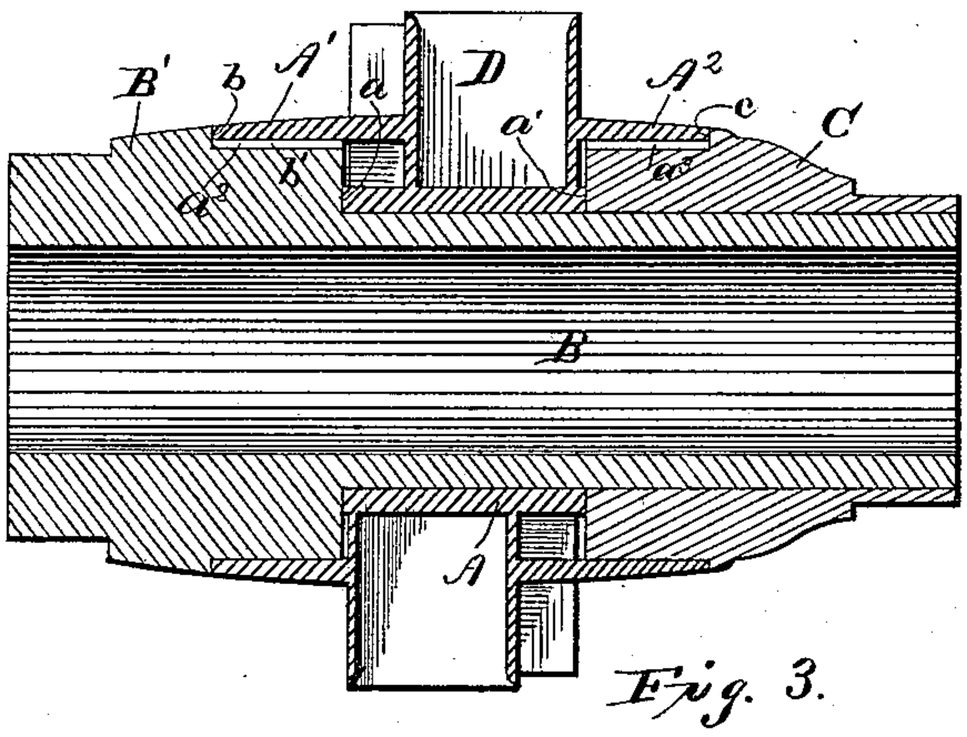


Fig. 3.

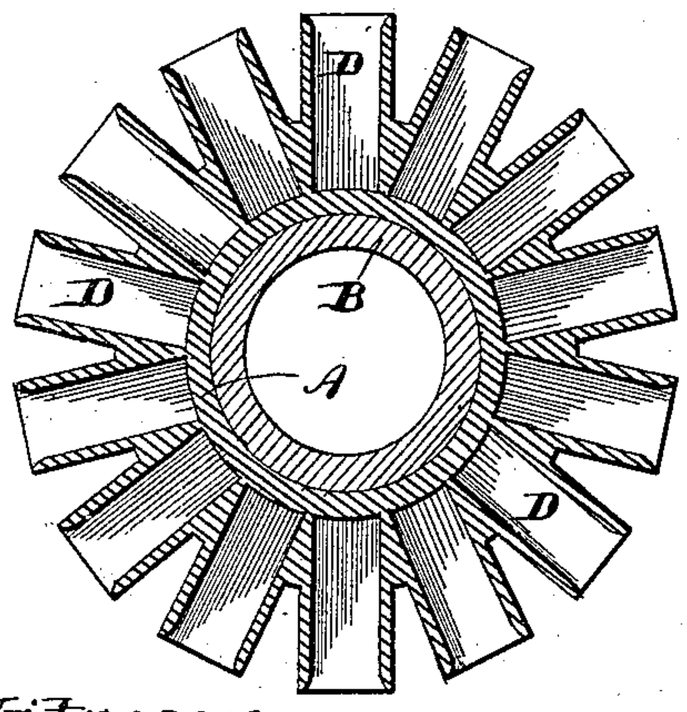
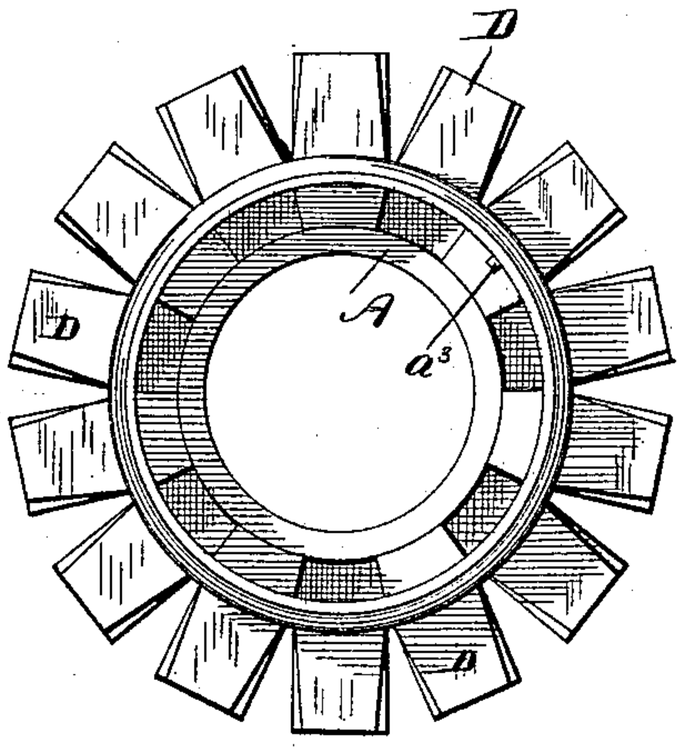


Fig. 4.



Witnesses.
Chas. R. Burr.
A. J. Stewart.

Inventor.
John M. Sweet
by Franck D. Johns
his Attorney.

UNITED STATES PATENT OFFICE.

JOHN M. SWEET, OF BATAVIA, NEW YORK.

WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 345,006, dated July 6, 1886.

Application filed November 13, 1885. Serial No. 182,745. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. SWEET, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented certain new and useful Improvements in Wheel-Hubs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in wheel-hubs which are made partly of wood and partly of metal.

It consists in certain novelty of construction and arrangement of the various parts, all of which I will now proceed to point out and describe, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective of my invention; Fig. 2, a vertical longitudinal section taken through the center of the hub; Fig. 3, a cross-section taken through the center of said hub; and Fig. 4 is a detail.

Referring to said drawings, A is a metal band or collar having shoulders *a a'* on its inside. The outer surface of said collar is formed like the central portion of the outer surface of an ordinary wheel-hub. Said outer surface is also extended at each end to form the annular flanges A' A², which project from the shoulders *a a'*.

B is a wooden core or hub having the enlarged end B', which forms the inner end of the hub. The enlarged end B' is provided with an annular shoulder, *b*, and flange *b'*.

When the various parts of the hub are put together, the core B is forced onto the collar A until the flange *b'* is under the inner annular flange, A', on the collar, and its inner end comes against the shoulder *a*, the outer edge of the flange A' resting against the shoulder *b*. The outer end of the core then projects through the collar and beyond the outer edge of the flange A².

C is a wooden collar forming the outer end of the hub. Said collar is provided with an annular shoulder, *c*. After the core B has been forced through the collar A the collar is forced over the outer end of said core, and under the flange A², until it comes in contact with the shoulder *a'*, the outer edge of flange A² resting against the shoulder *c*, thus forming a complete wheel-hub.

a² a³ are ribs on the inside of the flanges A' A², which enter the wooden flange *b'* and wooden collar C, and effectually prevent the collar A from turning on the core.

D are spoke-sockets, which project from the periphery of the collar A, and extend down into said collar, but do not go through the same. The sockets are arranged so that the spokes will be staggered. Said sockets are also larger on the inner side of the wheel. The tenons of the spokes are also larger on the same side, thus strengthening the wheel on its inner side, where there is the greatest strain.

E is a spoke inserted in one of the sockets, the outer surface of said spoke being flush with the outer surface of the projecting portion of the socket. By constructing the socket with a projecting portion I am able to make a much longer tenon on the spoke, which greatly increases its strength. As the sockets do not go entirely through the band or collar A, the spokes do not come in contact with the wooden portion of the hub, thus preventing any oil which might penetrate said wooden portion from getting into the sockets and loosening the spokes.

My improved wheel-hub is strong and compact, and looks like an ordinary wooden hub, while at the same time it has much greater strength and durability.

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

1. In a wheel-hub, a metal collar provided with spoke-sockets on its periphery, and having its outer surface extended and forming annular flanges on its inner and outer ends, in combination with a wooden core surrounded by and projecting through the metal collar, and having an enlarged inner end projecting under the annular flange on the inner end of the metal collar, and a wooden collar surrounding the outer end of the wooden core, and projecting under the annular flange on the outer end of said metal collar, all constructed and arranged substantially as shown and described.

2. In a wheel-hub, a wooden core, B, provided with the enlarged inner end, B', having

the flange b', in combination with the metal collar A, having spoke-sockets D on its periphery, and provided with annular flanges A' A^2 on its inner and outer ends, and the wooden collar C, said core B being surrounded by and projecting through the collar A, and having the flange b' projecting under the flange A', and said collar C surrounding the outer end of the core B, and projecting under the flange A^2, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. SWEET.

Witnesses:
THOS. MOGRIDGE,
FRANK L. CRANE.