(No Model.)

C. E. HUNT.

VEHICLE WHEEL HUB.

No. 392,123. Patented Oct. 30, 1888.

FIG. 1.

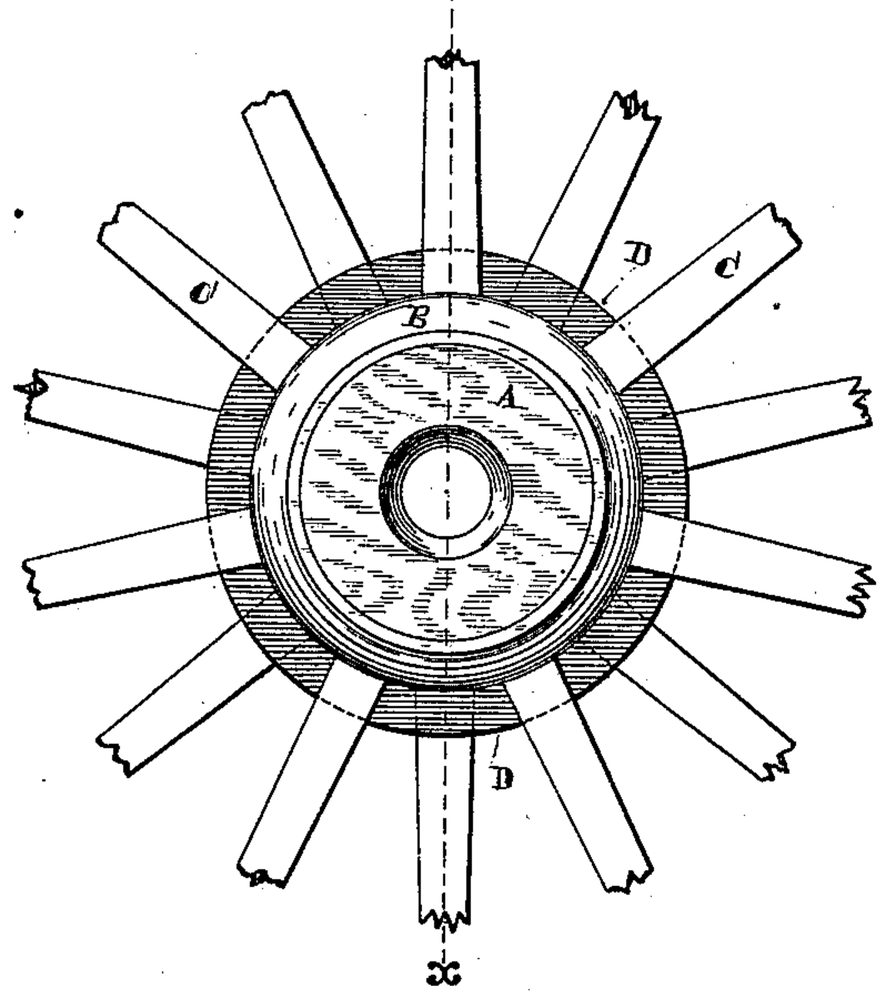
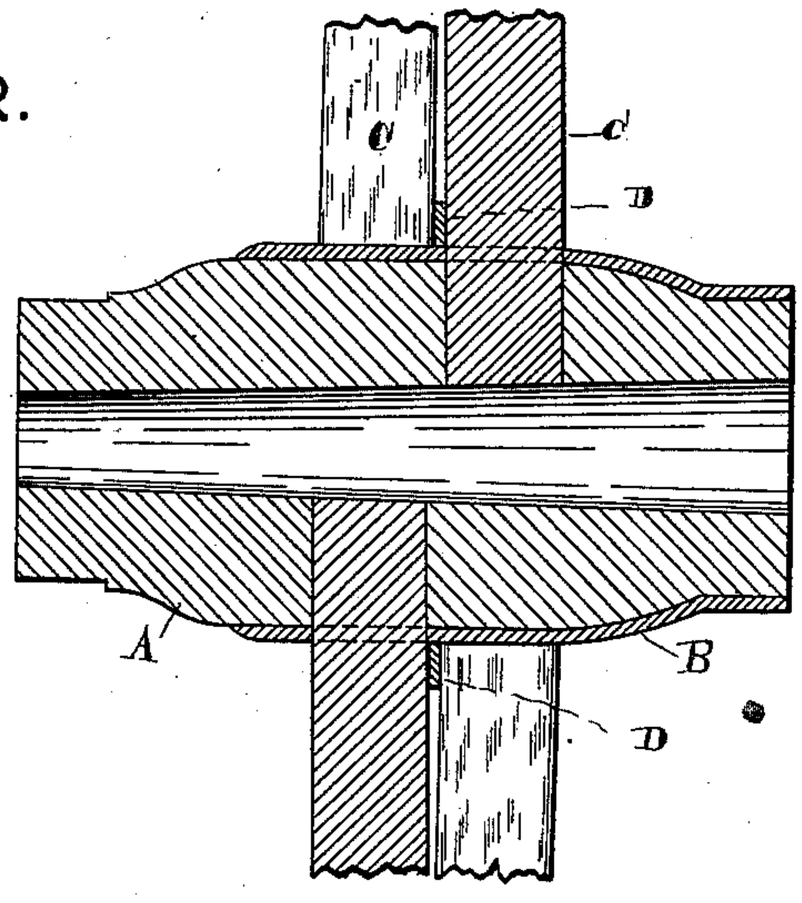


FIG. 2.



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UNITED STATES PATENT OFFICE.

CHARLES E. HUNT, OF MIAMISBURG, OHIO.

VEHICLE-WHEEL HUB.

SPECIFICATION forming part of Letters Patent No. 392,123, dated October 30, 1888.

Application filed June 20, 1888. Serial No. 277,655. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. HUNT, a citizen of the United States, and a resident of Miamisburg, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Vehicle-Wheels, of which the following is a specification.

My invention relates to that class of vehicle-wheels in which what are commonly known as "staggered" spokes are employed in connection with a shell-band or metallic-incased hub. The "shell-hub," while it possesses many advantages which have made it deservedly popular, the principal of which are its strength, lightness, and compact neat appearance, yet has one serious defect, which is not apparent at first, but develops after the wheel has been in use for a short time. The cause of this trouble is that the elasticity of the spokes, which is necessary to a perfect wheel, is suddenly arrested by the thin metallic inner walls of the spoke sockets or mortises in the hub-shell, which soon cut into the adjacent edges of the spoke-tenons and cause loose joints. An attempt has been made to remedy this defect by casting a flange integral with the hub-band, which flange extends outward from the inner walls of the spoke-mortises and bears upon the inner edges of the spokes. This flange adds greatly to the cost of molding the hub-shell, and in use is quite rigid, simply transferring the strain from the tenons of the spokes at the shell-band to that part of the spokes abutting against the outer edge of the flange. I have discovered that by placing a loose band or ring of steel or malleable metal over the hub-shell and between the two rows of spoke-sockets, to bear against the inner edges of the staggered spokes, that elasticity of the spoke throughout its entire exposed length is not interfered with, but rather aided, and that in use any sudden jars or shocks are taken up by the loose ring without injury to the spokes. The result is a much more elastic wheel at a reduced cost of production. It has also been proposed to use the ring between staggered spokes upon a wooden hub; but the wheel so made was found defective and was not adopted generally.

Referring to the accompanying drawings, in which like parts are indicated by similar reference-letters wherever they occur throughout the various views shown, Figure 1 is an end elevation of a vehicle-hub with so much of the spokes as is necessary to illustrate my invention. Fig. 2 is a diametrical section taken through line *x x* of Fig. 1.

There is no novelty in the hub A, the shell-band B of the spokes C, nor in the manner of constructing these parts separately. They need not, therefore, be particularly described separately. I have selected one form of a metal-incased hub and staggered-spoke wheel to illustrate my invention.

My invention consists in sleeving the flat metal ring D over the shell C.

It will thus be seen that the only additional expense to the neat compact shell-band hub is the ring D, which renders the wheel more elastic and durable without in the least detracting from its appearance.

I claim—

In a carriage-wheel, the combination, substantially as hereinbefore set forth, of the hub A, the metallic shell B, incasing the hub, the staggered spokes C, and the metal ring D, sleeved over the incased hub between the spokes and abutting against them.

CHARLES E. HUNT.

Witnesses:

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