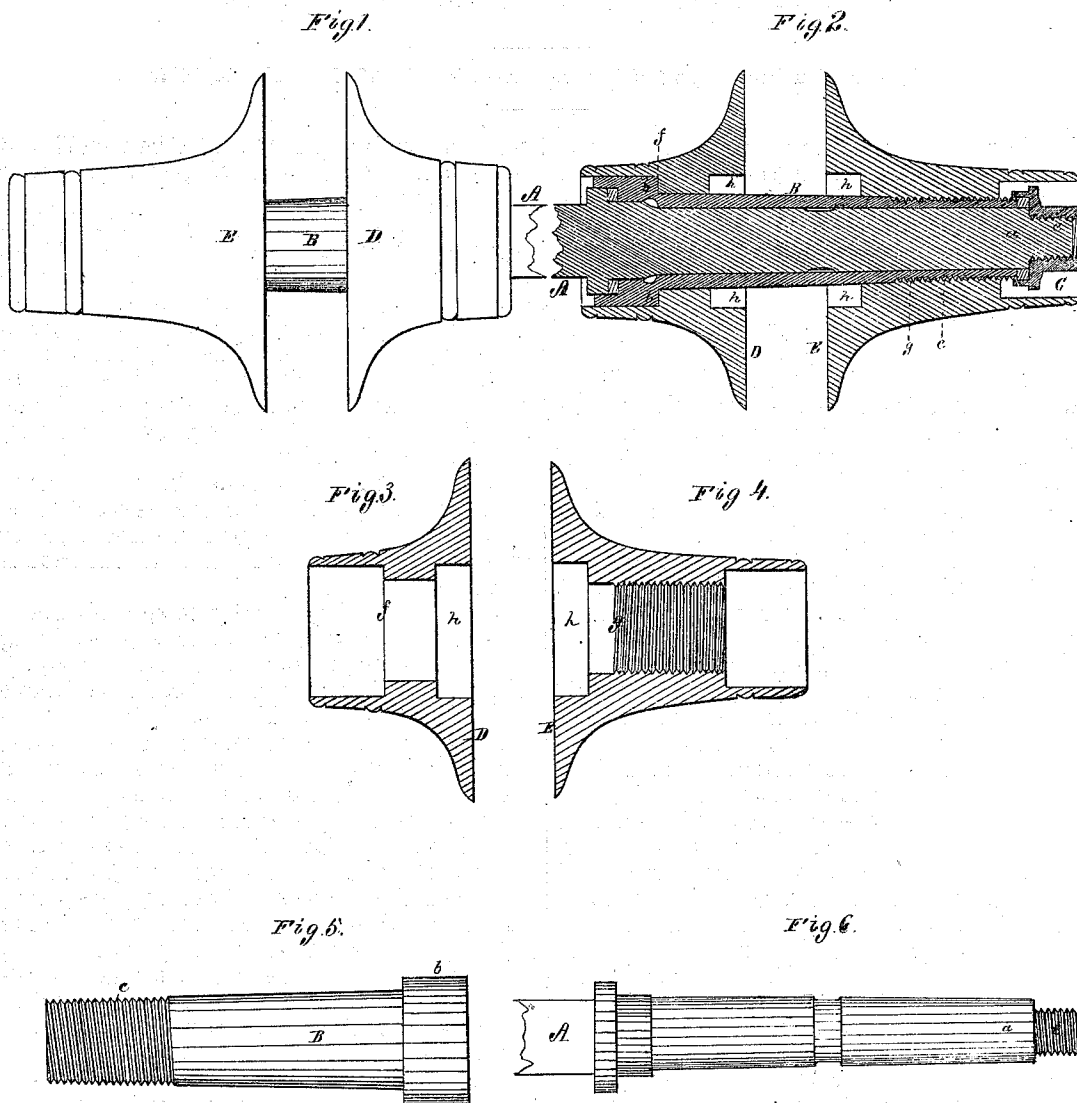


CHARLES C. HOLT.

Improvement in Carriage-Wheel Hubs.

No. 126,810.

Patented May 14, 1872.



Witnesses.

S. N. Piper

L. N. Mollen

Charles C. Holt.

by his attorney.

N. W. Ludy

UNITED STATES PATENT OFFICE.

CHARLES C. HOLT, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN CARRIAGE-WHEEL HUBS.

Specification forming part of Letters Patent No. 126,810, dated May 14, 1872.

To all persons to whom these presents may come:

Be it known that I, CHARLES C. HOLT, of Lawrence, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Carriage-Wheel Hubs; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side view, and Fig. 2 a longitudinal section of an axle-journal; its sleeve and the hub portions connected with such sleeve. Figs. 3 and 4 are separate sections of such wheel-hub portions or spoke-holders. Fig. 5 is a side view of the sleeve or box. Fig. 6 is a side view of the axle-journal.

In such drawing, A denotes the axle or a part thereof, and *a*, the journal, provided at its outer end with a screw, *e*, to receive a nut, C. The sleeve or box in which the journal turns is shown at B. Near its rear end such box is provided with a shoulder, *b*, and at some distance back from its front end the box or sleeve has a male screw, *c*, formed on it, to screw into one of the spoke-holders D E—viz., into the latter of the two which is bored to receive the sleeve—and provided with a female screw, *g*, to receive the screw *c*, all being as shown. The threads of screws *c g* are, however, to be pitched in a direction opposite to those of the screw *e* and nut C. This enables the axle to be used to effect rotary motion of the sleeve, in manner and for the purpose of screwing it into the spoke-holder E, as hereinafter explained. By having both holders D E separate from each other and the sleeve, the latter can be revolved within them without causing either to turn against the spoke-heads. The spoke-holder or clamp D is bored to receive the sleeve or box, and is furnished in the bore with a shoulder, *f*, to abut against the shoulder *b* of the sleeve, such shoulders being arranged in manner as represented. The heads of the spokes are to go between the two spoke-holders D E, constituting parts of the hub. The holder D is to be set up toward the holder E, so as to clamp the holders to the spokes. This latter may be effected by placing a washer between the nut C and the next adjacent end of the sleeve or box B, screwing the nut C hard down upon such washer, so as to confine the sleeve to the journal, and afterward revolving the axle so as to

turn the box and screw it into the part E, and thereby crowd the part D against the heads of the spokes.

From the above it will be seen that the hub is composed of the sleeve or box B, and the two spoke-holders D E, and thus is very simple in construction, all being made of metal. No bolts are required to hold the spokes in place in the hub. By removing the washer from the journal the latter will become so freed from the sleeve as to be capable of freely revolving within it, or of playing endwise, as occasion may require.

Each holder D or E is chambered, as shown at *h h*, concentrically with the sleeve B, such chambers being to receive a false hub or wooden tube for the inner ends of the spokes to abut against.

I make no claim, broadly, to spoke-holders, a separate sleeve or box, and spoke-holding plates, screw bolts and nuts, made, arranged, and combined as shown in the United States Patent No. 118,589. Nor do I claim spoke-holders and a separate sleeve or box, made, arranged, and applied together, as shown in the United States Patent 123,480. Neither of said patents represents the axle-journal and its nut constructed with their screw-threads to pitch in directions opposite to those of the screws of the sleeve and holding plate; and, furthermore, neither of such patents shows the holding plates as made with spoke-bearings, and chambered as mine are, to receive a wooden tube to encompass the sleeve and support the spokes at their inner ends. Therefore,

I claim—

1. In combination with the spoke-holders D E and the separate sleeve or box B, arranged and provided with shoulders *b f* and screws *c g*, as set forth, the axle-journal *a* and the nut C, as constructed with their screw-threads to pitch in directions opposite to those of the screws *c g*, all being essentially as specified.

2. I also claim the spoke-holders D E, as provided with spoke-bearings and as chambered, as shown at *h h h h*, when arranged and combined with the sleeve or box B, having shoulders and screws, as set forth, the chambers of the holders being to receive a tube when placed on the sleeve or box B, as described.

Witnesses: CHARLES C. HOLT,

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