

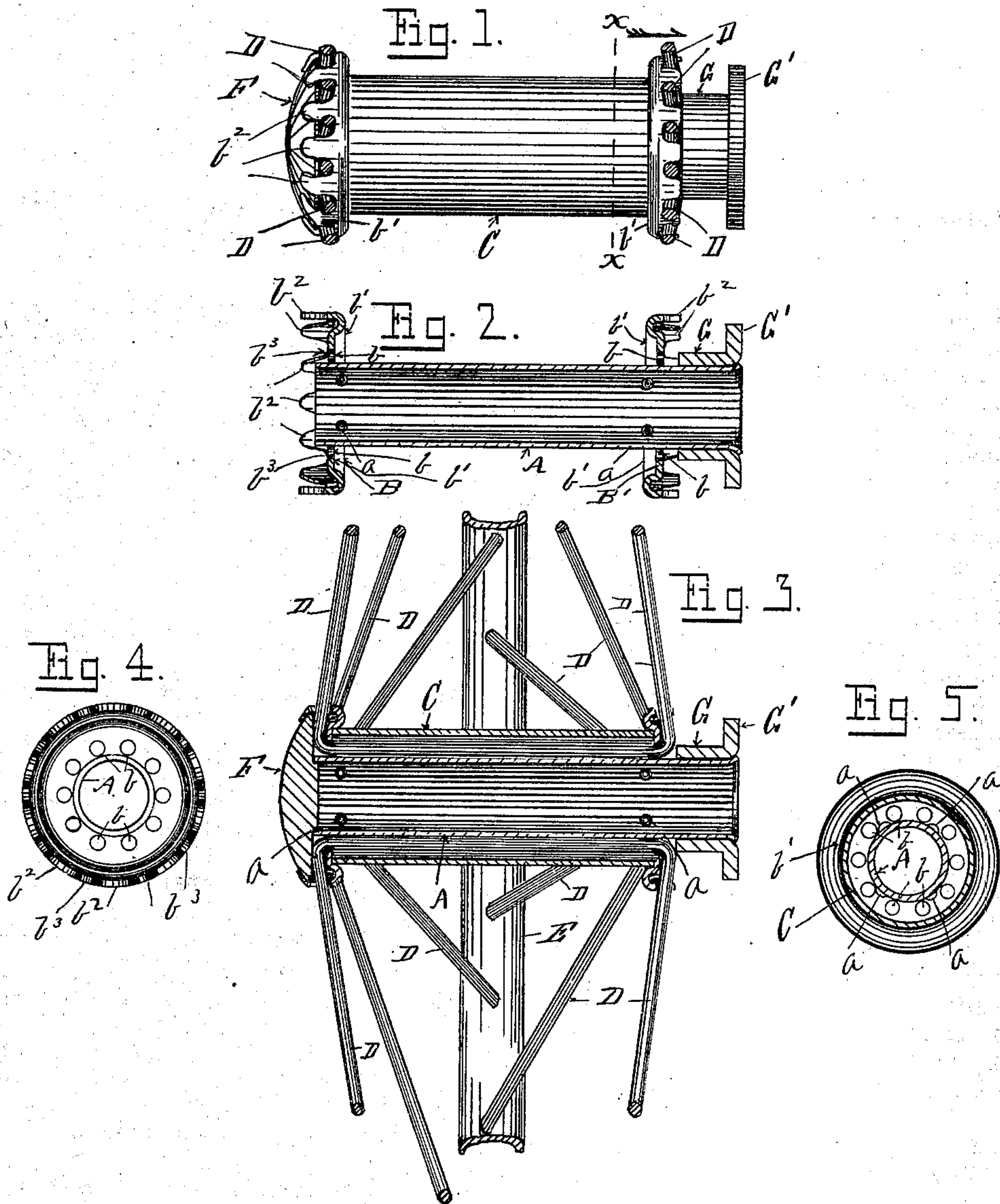
No. 709,375.

Patented Sept. 16, 1902.

H. N. THAYER.
WHEEL HUB.

(Application filed July 5, 1902.)

(No Model.)



Witnesses.
F. J. Bassett.
H. W. Sturgeon.

Inventor.
Horace N. Thayer
By H. W. Sturgeon
att'y.

UNITED STATES PATENT OFFICE.

HORACE N. THAYER, OF ERIE, PENNSYLVANIA.

WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 709,375, dated September 16, 1902.

Application filed July 5, 1902. Serial No. 114,453. (No model.)

To all whom it may concern:

Be it known that I, HORACE N. THAYER, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention relates to improvements in wheel-hubs, and particularly to the construction of wheel-hubs for children's carriages and other light vehicles, and has for its object the production of a wheel-hub from parts preferably of light sheet metal so made and arranged with relation to each other as to make a wheel-hub and at the same time provide means for closing the outer end of the hub, so that the hub when completed is not only strong and serviceable, but light and symmetrical in appearance. I accomplish these results in the manner hereinafter set forth and explained, and illustrated in the accompanying drawings, in which—

Figure 1 is a side view in elevation of my improved wheel-hub with the spokes broken away. Fig. 2 is a longitudinal section of the same without the spokes. Fig. 3 is a like section of the same complete with part of a wheel. Fig. 4 is an end view in elevation of one of the collars forming part of the hub. Fig. 5 is a transverse section of the hub without spokes on the line $x-x$ in Fig. 1.

In the drawings illustrating my invention, A is a thimble, preferably made of sheet metal and preferably provided with small raised projections a , or, if desired, with annular beads. Upon this thimble I place pressed sheet-metal collars B and B', which slide onto the ends of the thimble A until they contact with the projections a thereon. These collars are provided with holes b to receive the spoke-wires and with beads b' on their inner faces to receive the ends of a tube or shell C, which operates to sustain the collars B B' against inward pressure and at the same time forms the outside shell of the central part of the hub. The peripheries of

these collars B B' are provided with teeth b^2 and scallops b^3 , which teeth in the forming of the beads b' on the collars are turned or flanged outward, as illustrated particularly in Figs. 1, 2, and 4, so that after the spokes D are threaded through the holes b' in the collars parallel with the thimble A they can be bent up into the scallops b^3 between the teeth b^2 on the collars B and B', as illustrated in Figs. 1 and 3, and joined to the wheel-rim E, as illustrated in Fig. 3, after which a disk F, preferably of rubber or other flexible material, is placed against the outer end of the thimble A and inside of the outwardly-projecting teeth b^2 , against the upturned spokes D, and the outer ends of the teeth b^2 bent down over and upon the periphery of the disk F, so as to secure it in place and securely close the outer end of the hub, as illustrated in Figs. 1 and 3, and on the opposite or inner end of the thimble A, I place a sleeve G, the inner end of which contacts with the upturned spokes D, while the outer end is provided with an annular flange G' for securing the hub to the axle, this sleeve G being secured to the thimble A by slightly swaging the periphery of the outer end thereof outward, as clearly shown in Figs. 2 and 3. It will be observed that in this construction I produce a serviceable wheel-hub of sheet metal, which is of very light weight and of symmetrical and pleasing appearance.

Having thus described my invention so as to enable others to construct and use the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination in a wheel-hub of a central thimble, inwardly-beaded and outwardly-flanged collars with spoke-openings therein on said thimble, and an outer shell or covering between said collars held in place by the beads thereon, substantially as set forth.

2. The combination in a wheel-hub, of a central thimble, inwardly-beaded and outwardly-flanged toothed collars thereon having spoke-openings therein, spokes in the openings of said collars extending through both collars and turned outward between the teeth thereon, a tubular shell between said collars covering the spokes and thimble, and a cap on the outer end of the hub secured in

place by turning inward the teeth on the outer hub-collar, substantially as and for the purpose set forth.

3. The combination in a wheel-hub, of a
5 central thimble, a sheet-metal collar having its periphery flanged outward on the outer end of the thimble, and a disk closing the outer end of the hub and secured thereto by bending the flanged portion of the sheet-metal
10 collar down over the periphery of the disk, substantially as set forth.

4. The combination in a wheel-hub of a central thimble A, peripheral projections a , thereon, collars B B' on said thimble, beads
15 b' on their inner faces, outwardly-flanged teeth b^2 on their peripheries and spoke-openings b in said collars, spokes D passed through the

openings in said collars and bent outward against their outer faces between the peripheral teeth thereon, a shell C covering and in- 20 closing the spokes D between the collars B and B', a cap F closing the outer end of the hub and secured thereto by bending the teeth down over the periphery of said cap, and a flanged sleeve G secured to the inner end of 25 the thimble, substantially as and for the purpose set forth.

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

HORACE N. THAYER.

Witnesses:

H. M. STURGEON,
F. J. BASSETT.