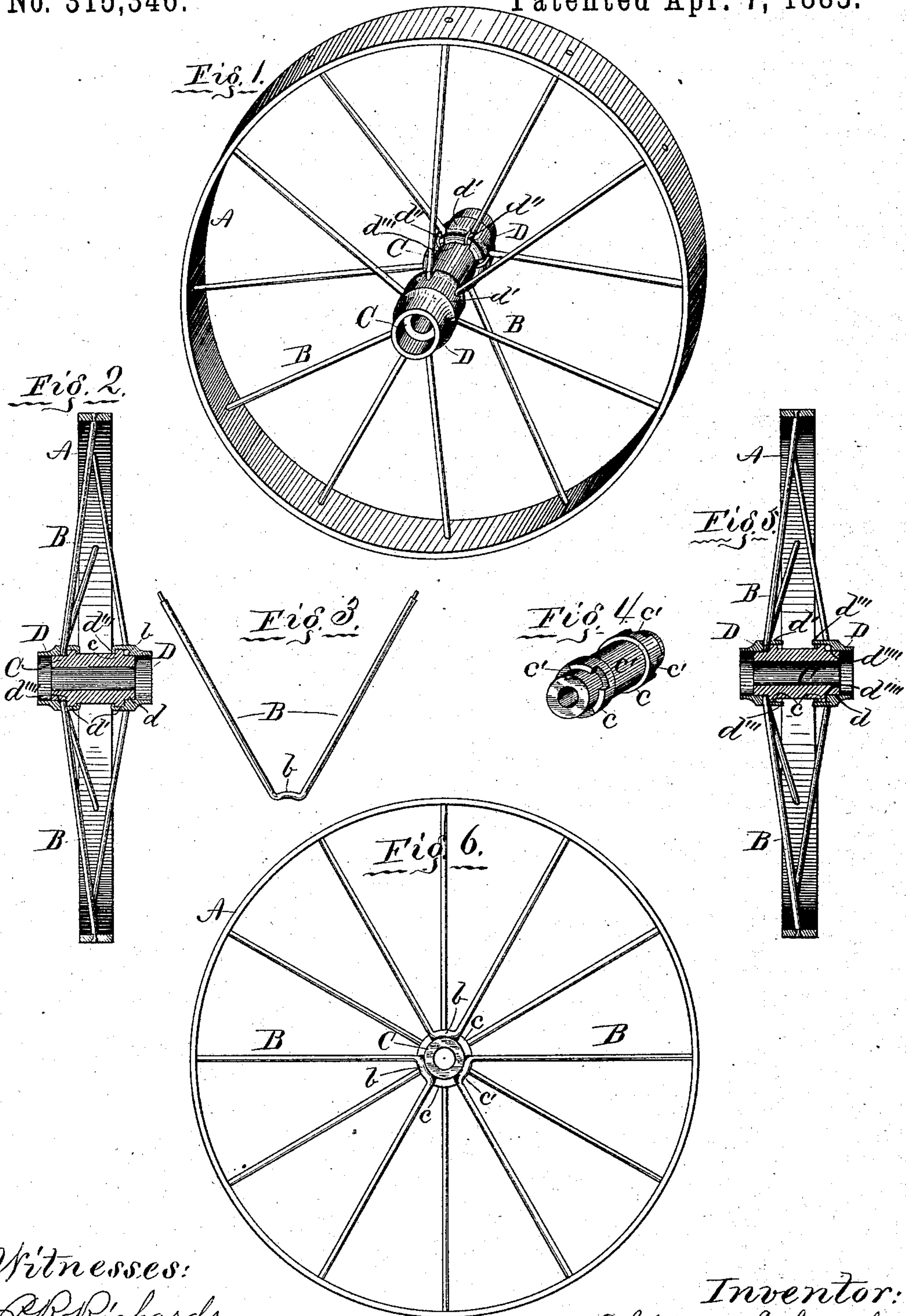


(No Model.)

P. SCHEMBER.
IRON WHEEL.

No. 315,346.

Patented Apr. 7, 1885.



Witnesses:
S. R. Richards,
Geo. Smith,

Inventor:
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UNITED STATES PATENT OFFICE.

PHILIPP SCHEMBER, OF PEKIN, ILLINOIS.

IRON WHEEL.

SPECIFICATION forming part of Letters Patent No. 315,346, dated April 7, 1885.

Application filed October 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, PHILIPP SCHEMBER, a citizen of the United States, residing at Pekin, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Iron Wheels; 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to iron wheels; and it consists in improvements hereinafter described and claimed.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective of the wheel in its completed form. Fig. 2 is a sectional elevation of Fig. 1. Fig. 3 is a detail showing two of the spokes formed of one rod. Fig. 4 is a perspective of the hub. Fig. 5 is a sectional elevation of the wheel as it is before the tongues of the spoke-holding bands are clinched. Fig. 6 is a side elevation of the wheel without the spoke-holding bands in place.

Referring to the drawings by letters, the same letter indicating the same part in the different figures, A represents the rim; B, the spokes; C, the hub, and D the spoke-holding bands. The hub C is a cylinder with two exterior annular projections or ribs, *c*. Each rib *c* has a series of recesses, *c'*, in its side toward the adjacent end of the hub. The spokes are formed of rods of iron or steel bent, as shown more plainly at Fig. 3, to form two spokes, with a part, *b*, uniting them. The part *b* of each pair of spokes is bent to fit snugly in a recess, *c'*. The outer ends of the spokes are shouldered and riveted in the rim A; but they may be otherwise secured to the rim, if preferred. The spoke-holding bands D are formed, as shown, each with a portion, *d*, which fits snugly the outer cylindrical end of the hub, and an enlarged portion, *d'*, which fits snugly over one of the ribs *c*. The enlarged part *d'* of the bands D have recesses *d''* formed in them, each recess adapted to fit a spoke, and the tongues or projecting parts

d''', formed by the metal between the recesses *d''*, project beyond or over the adjacent rib *c*. The spokes are placed relatively on the hub, as shown in the drawings, with the parts *b* of one series of spokes resting in the recesses *d* of one rib *c*, and the parts *b* of another series resting in the similar recesses in the other rib *c*; and when their outer ends are fixed in the rim the one series of spokes will be bracing to the other series to form what is generally known as "staggered" spokes. The bands D, when placed as shown at Fig. 5, rest with the shoulder *d'''*, between the enlarged and contracted portions, against the outer sides of the parts *b* of the spokes, so that when the tongues *d* are turned down or clinched over the rib *c*, as shown at Figs. 1 and 2, the bands D will be firmly held in place, and thereby secure the spokes firmly to the hub. By reason of the parts *b* of the spokes being bent to fit the outer curved surface of the hub, as shown at Fig. 6, and the inner curved surface of the bands D, their connection to the hub is made unusually rigid.

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

1. In a wheel, in combination with a cylindrical hub having annular ribs *c*, with recesses *c'*, and spokes formed of rods bent substantially as described, the bands D, having an enlarged portion and contracted portion and recesses *d*, and a rim secured to the outer ends of the spokes, substantially as and for the purpose specified.

2. In a wheel, the combination of a cylindrical hub having recesses *c'*, spokes formed of rods bent substantially as described, and having the bend resting on the bottom of said recesses, a band overlapping the recesses and bends, and having slots through which the spokes project, and a rim secured to the outer end of said spokes, substantially as described.

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

PHILIPP SCHEMBER.

Witnesses:

C. A. KUHLE,
CONRAD LIESCHIEDT.