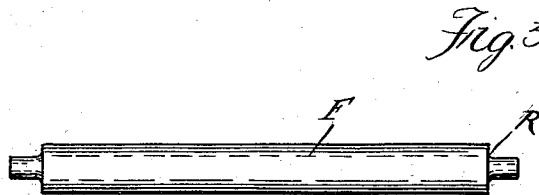
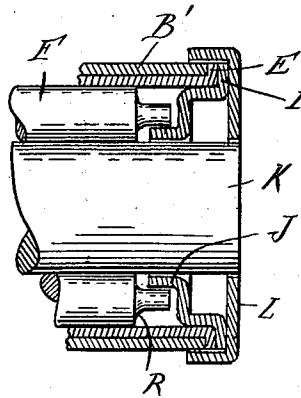
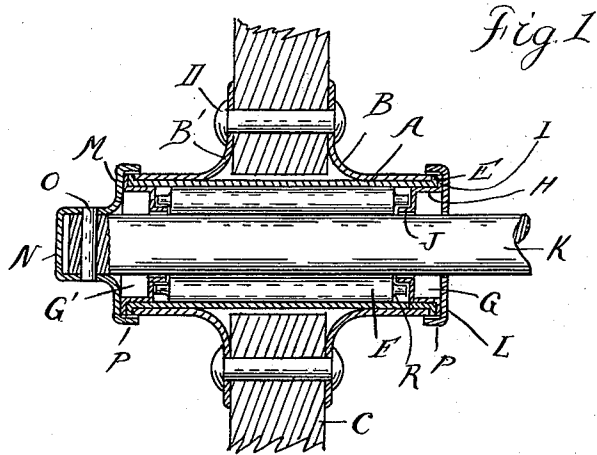


J. F. VOGEL.
WHEEL HUB.
APPLICATION FILED FEB. 7, 1916.

1,242,277.

Patented Oct. 9, 1917.



Inventor
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UNITED STATES PATENT OFFICE.

JOSHUA F. VOGEL, OF TOLEDO, OHIO, ASSIGNOR TO GENDRON WHEEL COMPANY, OF TOLEDO, OHIO, A CORPORATION OF OHIO.

WHEEL-HUB.

1,242,277.

Specification of Letters Patent.

Patented Oct. 9, 1917.

Application filed February 7, 1916. Serial No. 76,706.

To all whom it may concern:

Be it known that I, JOSHUA F. VOGEL, a citizen of the United States of America, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Wheel-Hubs, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to wheel hubs particularly designed for use on toy wagons, and it is the object of the invention to obtain a simple construction provided with a retained roller bearing, permitting of readily attaching to and detaching from the vehicle.

In the drawings:

Figure 1 is a longitudinal section through the hub;

Fig. 2 is an enlarged view showing the manner of retaining the rolls; and

Fig. 3 is a side elevation of one of the rolls detached.

A is the cylinder or barrel of the hub. B and B' are flanged sleeves engaging said barrel upon opposite sides of the spokes C, to which they are secured by rivets D or other suitable means. The opposite ends of the barrel are preferably turned over the ends of the sleeves B and B', as indicated at E. F are rolls within the barrel A, and G and G' are retainers for the rolls, each of which is provided with a cylindrical portion H for fitting within the barrel, a flange I for overlapping the end of the barrel and an inwardly-extending flange J for underlapping the ends of the rolls which are reduced in size. As shown the reduced ends conform with the square shoulder which cooperates with the edge of the flange J to limit endwise movement of the roll. However, as more clearly shown in Fig. 3, the reduced ends are not absolutely square shouldered, a fillet R being preferably employed at the junction of each of the reduced ends with the main portion of the roller.

A hub construction as thus far described is self-contained and may be readily mounted upon the axle such as K, the load being

carried by the roller bearings. The retainers G and G' will serve to hold the lubricant in the hub around the rolls, and to exclude the dust, caps L and M are arranged at opposite ends. The inner cap L is apertured for the passage of the shaft K, while the outer cap is cupped at N to receive the shaft to which it is attached by a cotter-pin O or other suitable means, both caps having flanges P overlapping the barrel and forming the dust joint.

What I claim as my invention is:—

1. A wheel hub, comprising a barrel, a series of rolls therein having their end portions reduced in diameter, retainers for said rolls at opposite ends of said barrel, each having a portion fitting within the barrel, a flange overlapping the end of the barrel and an inwardly-extending flange underlapping the reduced ends of the rolls.

2. A wheel hub, comprising a barrel, a series of rolls therein having their opposite end portions reduced in diameter forming substantially square shoulders between the same and the remaining portion of the rolls, retainers for said rolls at opposite ends of the barrel each having a portion fitting within the barrel and an inwardly-extending flange underlapping the reduced ends of the rolls, the edge of said flange cooperating with the shoulders on the rolls to limit endwise movement thereof.

3. A roller bearing assembly comprising a barrel, a series of rolls therein and retainers for said rolls at the ends of the barrel, each having a portion fitting within the barrel, a flange overlapping the end of the barrel, and an inwardly-extending flange underlapping the adjacent extremities of the rolls.

4. A wheel hub, comprising a barrel, a series of rolls therein having their end portions reduced in diameter, retainers for said rolls at opposite ends of said barrel each having a portion fitting within the barrel, a portion exterior to the barrel bearing against the adjacent end thereof, and an inwardly extending flange underlapping the reduced ends of the rolls.

5 5. A roller bearing assembly comprising a barrel, a series of rolls therein and retainers for said rolls at the barrel ends, each having a portion within the barrel, a portion exterior to the barrel engaging the adjacent end thereof, and an inwardly-extending flange underlapping the adjacent ends of the rolls.

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

JOSHUA F. VOGEL.

Witnesses:

J. WEIR COOVER,
WILLIAM J. SCHNEIDER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."