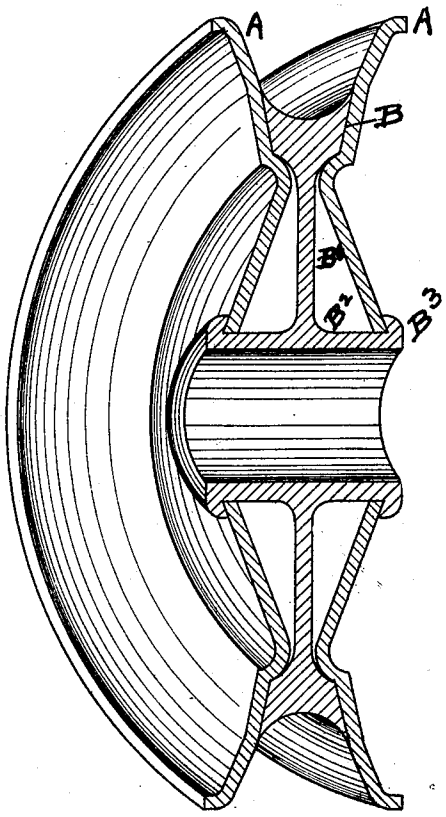
No. 897,667. PATENTED SEPT. 1, 1908.

E. P. SHARP.

TROLLEY WHEEL.

APPLICATION FILED DEC. 26, 1905.



Witnesses.

C. W. Simpson

L. A. Kendall

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EDWARD P. SHARP, OF BUFFALO, NEW YORK.

TROLLEY-WHEEL.

No. 897,667. Specification of Letters Patent. Patented Sept. 1, 1908.

Application filed December 26, 1905. Serial No. 293,151.

To all whom it may concern:

Be it known that I, EDWARD P. SHARP, a citizen of the United States, residing in the State of New York, county of Erie, and city of Buffalo, have invented new and useful Improvements in Trolley-Wheels, of which the following is a specification.

My invention relates to that class of wheels which are used for conducting electric power from a stationary wire connected with a source of supply to the motor of a moving vehicle and to that type of wheels known as the built up or composite wheel as distinguished from the solid cast wheel in general use.

The object of my invention is to produce a wheel of strong but light construction, and of high electrical conductivity which may be made at a minimum price, making the different parts of material best adapted to the requirements of the service to which each part may be subjected; and while some of the parts may be made of material of great strength but high electrical resistance, I use this strength to reinforce the weaker conducting parts, without making them a necessary part of the electrical circuit. To do this I use a grooved contact ring of copper or other material of high electrical conductivity which is connected by a web or spokes with a tubular hub, preferably of a greater width than the ring. I also use independently fitted side plates made preferably of pressed steel which fit closely around the side of said ring, extending outwardly to form flanges of sufficient depth to hold the wheel on the wire; these side plates are also dished outwardly toward the center to form a brace for supporting the ring against side strains, and to give a sufficient length of hub to conform with standard requirements; and are provided with a central opening which fits closely around the tubular hub centering the ring and flanges with reference to each other.

The drawing herewith shows a sectional perspective view of my invention in which A A represents the side plates, B^1 the web or spokes connecting the contact ring B with the tubular hub B^2, and B^3 represents the heads formed on the ends of the tubular hub for holding the flanges together against the ring.

To assemble the parts I place a side plate on each side of the contact ring with the ends of the tubular hub extending through the central opening of said plates and upset these ends against the side plates, riveting the two plates together against the ring and forming a truss which supports the ring and which is in turn supported by the tubular hub portion of said ring. These ends are then pressed into parallel flat heads for the purpose of forming contact surfaces on each side of the hub.

I prefer to use a contact ring integrally connected with the hub; but a closely fitted mechanical joint or joints may be made between the two without departing from the spirit of my invention.

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

1. In a trolley wheel, the combination of a contact ring having an integrally connecting hub, two side plates which support said ring and which are in turn supported by said hub and expanded heads on the ends of said hubs for the purpose specified, substantially as described.

2. In a trolley wheel the combination of a contact ring having an integrally connected hub, side plates having a central opening adapted to receive said hub, and expanded heads on the ends of said hub, for the purpose of forming electrical contact surfaces, substantially as described.

3. In a trolley wheel, the combination of a contact ring having an integrally connecting hub, side plates arranged to support opposite sides of said ring, and expanded heads on the ends of said hub, for the purpose of connecting said side plates together against said ring, and forming electrical contact surfaces at the sides of said wheel, substantially as described.

4. In a trolley wheel the combination of side plates having central openings and a contact ring having an integrally connecting hub fitting into said openings, said hub extending axially outside of said flanges and expanded heads which form electrical contact surfaces at the sides of said wheel, substantially as described.

5. In a trolley wheel the combination of

side plates having central openings, a contact ring having an integrally connecting hub fitting into said openings and contact surfaces at the sides of said wheel formed by expanded heads on the ends of said hub, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two witnesses, this 15th. day of December, 1905.

EDWARD P. SHARP.

Witnesses:
H. R. BRIDGMAN,
L. M. KELLER.