

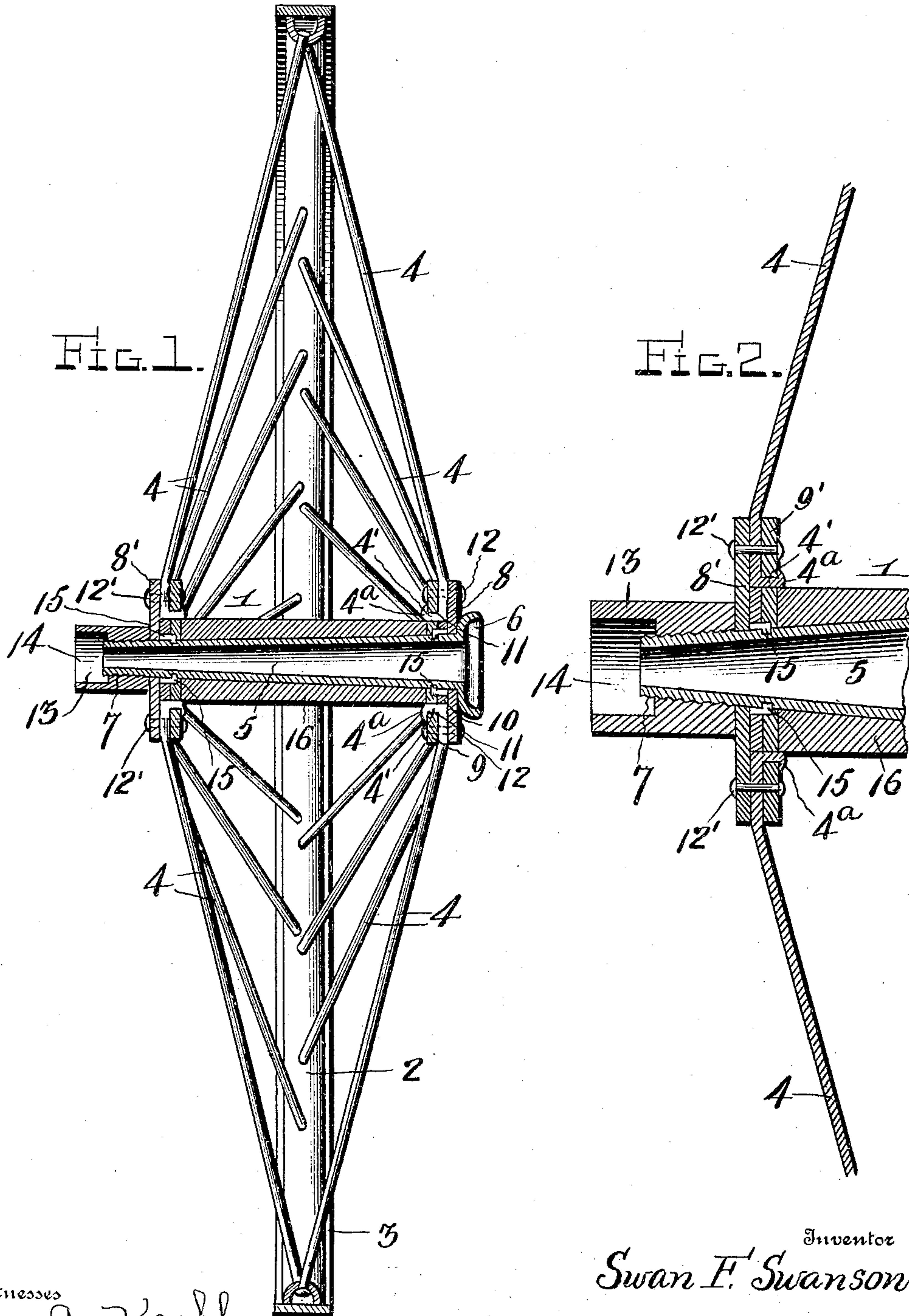
No. 767,254.

PATENTED AUG. 9, 1904.

S. F. SWANSON.
VEHICLE WHEEL.

APPLICATION FILED MAR. 17, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

SWAN F. SWANSON, OF PUEBLO, COLORADO.

VEHICLE-WHEEL.

SPECIFICATION forming part of Letters Patent No. 767,254, dated August 9, 1904.

Application filed March 17, 1904. Serial No. 198,635. (No model.)

To all whom it may concern:

Be it known that I, SWAN F. SWANSON, a citizen of the United States, residing at Pueblo, in the county of Pueblo and State of Colorado, have invented certain new and useful Improvements in Vehicle-Wheels; and I do 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.

This invention relates to improvements in vehicle-wheels, and its object is to provide an improved construction of hub and mode of fastening the spokes thereto.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a transverse section of the wheel; and Fig. 2 is a similar view through the hub, on an enlarged scale.

Referring to the drawings, 1 represents the hub of the wheel; 2, the felly thereof; 3, the tire, which may be of any preferred kind, and 4 the spokes. The invention resides in the construction of the hub and mode of application thereto of the spokes.

The hub comprises a tubular body 5, provided at one end with the usual sand cup or guard 6 to receive the shoulder at the inner end of the axle-spindle and formed with exterior screw-threads 7 at its opposite end.

Surrounding the tube 5 at its inner end are rings or washers 8 and 9, forming spoke-flanges, the outer ring or washer 8 resting against the shoulder 6 and the ring 9 being held in spaced relation thereto by a suitable intervening spacing ring or washer 10. In the ring 9 are formed openings 11, which receive the ends of the butts of the spokes 4, the butt portions of the spokes entering between said rings and thence being bent inwardly, as shown at 4', and passed through the openings 11 and headed or riveted, as shown at 4", on the inner side of the ring or flange 9. The two rings or flanges 8 and 9 are connected between the spokes by bolts or rivets 12, whereby the butts of the spokes are securely clamped between them. At the opposite end of the tube are washers or spoke-flanges 8' and 9', which are similar in construction to said flanges 8 and 9, and the spokes thereof are connected thereto in a simi-

lar way, these flanges being connected by the bolts or rivets 12'. In order to hold the outer flange 8' from disconnection, a nut 13 is screwed upon the threaded portion 7 of the body-tube 5, and the outer portion of this nut is chambered to form a guard 14 to receive and inclose the cap-nut applied to the end of the axle-spindle. The flanges 9 and 9' are held from rotation or twisting on the tube 5 by keys 15, and the two sets of flanges are held in proper relation by an interposed spacing-sleeve 16, which sleeve is clamped between them and forms the outer surface of the hub 1.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of the invention will be readily understood, and it will be seen that the construction shown enables the parts of the axle to be readily assembled and disassembled and at the same time enables the wheel to be quickly and cheaply made.

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

A vehicle-wheel having a hub comprising a body-tube having a shoulder at one end and threaded at its opposite end, pairs of washers upon said tube, the outer washers of the pairs being keyed to the body-tube and the inner washers of the pairs having spoke-openings, said washers forming spoke-flanges, spokes having their butts entering between said washers and bent and passed through said openings in the inner washers and headed, fastenings connecting each pair of washers between the spokes, a nut upon the threaded end of the tube and abutting against the adjacent outer washer, and a spacing-sleeve between the pairs of washers holding the same in spaced relation and in engagement with said shoulders and nut, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SWAN F. SWANSON.

Witnesses:

S. E. ELLMAKER,
R. A. CROSSMAN.