

(No Model.)

I. A. ELMER & T. H. JOHNSON.
SPOKE SOCKET.

No. 546,513.

Patented Sept. 17, 1895.

FIG. 1.

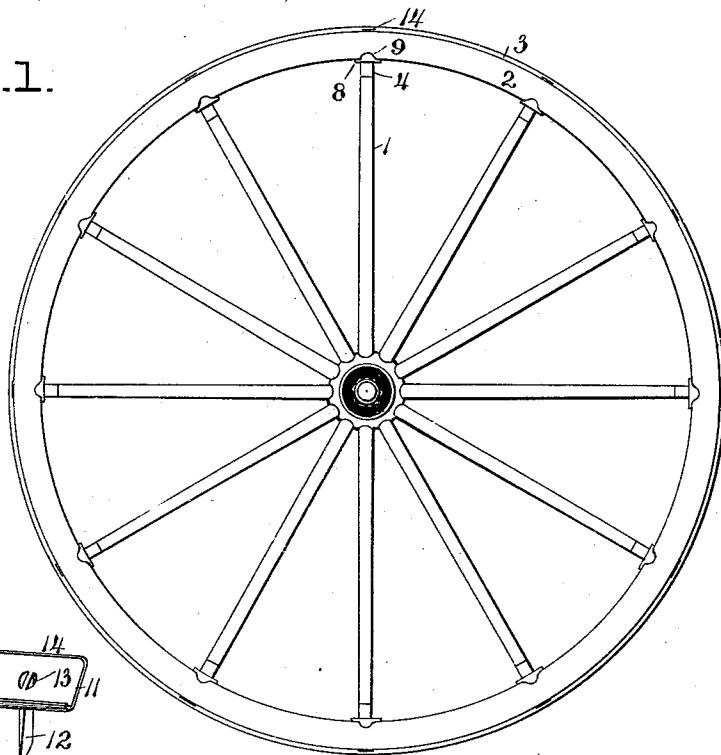


FIG. V.

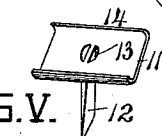


FIG. II.

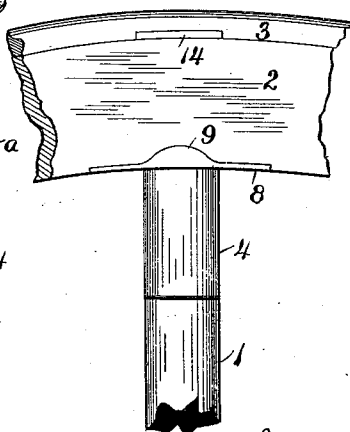


FIG. III.

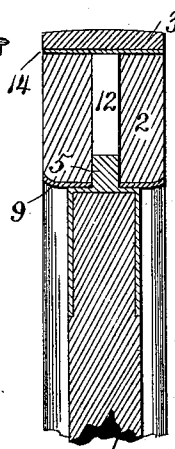
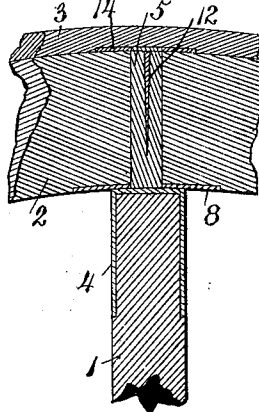


FIG. IV.



Witnesses.

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UNITED STATES PATENT OFFICE.

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SPOKE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 546,513, dated September 17, 1895.

Application filed December 26, 1894. Serial No. 532,947. (No model.)

To all whom it may concern:

Be it known that we, IRVING A. ELMER, of Kansas City, in the county of Jackson, in the State of Missouri, and THOMAS H. JOHNSON, of Farlington, in the county of Crawford, in the State of Kansas, have invented certain new and useful Improvements in Spoke and Felly Protectors and Tire-Holders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to certain new and useful improvements in spoke and felly protectors and tire-holders; and our invention consists in certain features of novelty hereinafter described, and pointed out in the claims.

Figure I represents a vehicle-wheel provided with our improvements. Fig. II represents a perspective view of a section of the same. Fig. III represents a cross-section of the wheel, showing our improvements thereon. Fig. IV represents a longitudinal section showing our improvements thereon. Fig. V represents a detailed view of the several parts of our improvements.

Similar numerals refer to similar parts throughout the several views.

1 represents the spoke of a wheel.
2 represents the felly.
3 represents the tire.
4 represents a ferrule adapted to be fitted upon the end of the spoke next to the felly.
5 represents a tenon formed on the ferrule and adapted to enter the felly.
6 represents a slot in the tenon.
7 represents the felly-plate, adapted to rest on the shoulder 5^a. It is provided with the leaves 8, conforming to the felly longitudinally, and the leaves 9, binding the felly laterally.

11 represents the tire-plate, provided with the key 12, adapted to enter the slot 6 of the tenon, the end of the tenon passing through the openings 13 therein by the side of the key.

14 represents flanges on the plate adapted to engage the tire and retain it in its place.

Our invention affords protection both to the spoke and felly. The ferrule 4 being fitted on the spoke the felly-plate is passed over the tenon and rests on the shoulder 5^a of the ferrule, and thus both the spoke and felly are protected from the pounding by which they are so much injured in the ordinary con-

struction, and the leaves 9, binding the felly, prevent any lateral motion tending to loosen the spoke. The tire-plate 11, being placed between the tire and the felly, the key 12 entering the slot 6 in the tenon, serves to wedge the tenon in place and prevents loosening of the plate laterally, while the flanges 14, being turned up along the tire, prevent the tires slipping and coming off and obviate the use of bolts through the tire, as in the ordinary construction, which constitute the principal advantages of our improvement.

Having thus fully described our improvement, what we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination with the spoke and felly of the vehicle wheel, of the ferrule adapted to be carried on the spoke, the slotted tenon thereon, the felly plate carried on the tenon and adapted to bind the felly, the tire plate carried on the outside of the felly and the key on the tire plate, adapted to enter the slot in the tenon, substantially, as herein shown and described.

2. The combination with the spoke, the felly, and the tire of the vehicle wheel of the ferrule carried on the spoke, the slotted tenon thereon, the felly plate carried on the tenon, and adapted to bind the felly, the tire plate between the felly and the tire, the key on the tire plate adapted to enter the slot in the tenon, and the flanges on the tire plate, adapted to engage the tire, substantially, as shown and described.

3. The combination with the spoke, the felly and the tire of the vehicle wheel of the ferrule carried on the spoke the slotted tenon thereon, the felly plate carried on the tenon, the leaves 8, on said plate extending longitudinally of the felly and conforming thereto, the leaves 9, binding the felly, laterally the tire plate, the key 12, thereon adapted to enter the slot in the tenon and the flanges on the said tire plate adapted to engage the tire, substantially as shown and described.

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