

(No Model.)

U. M. HASKINS.
SPOKE SOCKET.

No. 423,474.

Patented Mar. 18, 1890.

Fig. 1.

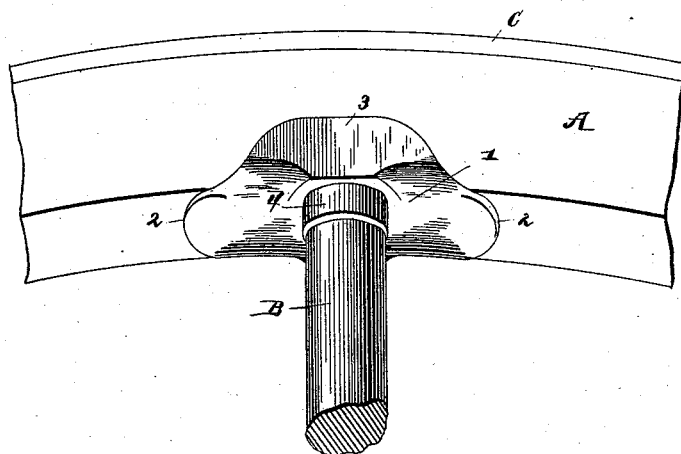


Fig. 2.

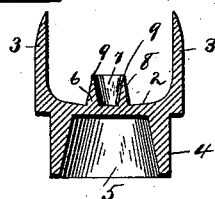


Fig. 3.

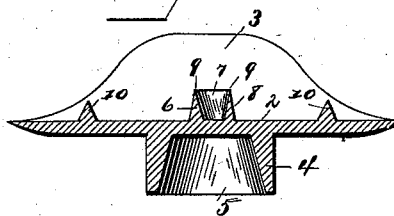
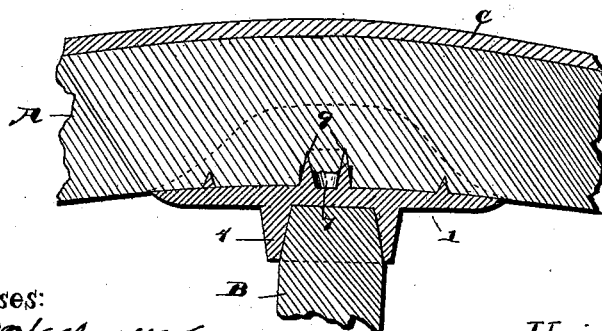


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

URIAL M. HASKINS, OF TAUNTON, MASSACHUSETTS.

SPOKE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 423,474, dated March 18, 1890.

Application filed October 11, 1889. Serial No. 326,684. (No model.)

To all whom it may concern:

Be it known that I, URIAL M. HASKINS, a citizen of the United States, residing at Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Spoke-Socket, of which the following is a specification.

This invention has relation to spoke-sockets.

10 The invention has special reference to sockets adapted for the repairing of worn-out wheels or those in which the tenons of the spokes have become worn, broken, or rotted away and parted from the rim, whereby the
15 wheel is rendered useless.

Among the objects in view are to provide a cheap and simple integrally-cast socket adapted to embrace the felly of a wheel and to be inserted between it and the end of the
20 spoke to receive the spoke and secure the same rigid with the rim, and to provide the socket with means formed integral therewith for rigidly connecting said casting with the rim, and that without the employment of extraneous fastenings or securing devices.

25 With these general objects in view the invention consists in the provision of an embracing-plate so constructed as to be of a substantial U shape in central cross-section,
30 which plate is adapted for receiving the inner edge or periphery of a felly, and is provided upon its outer surface with a cylindrical recessed boss or socket for receiving the outer end of a spoke and upon its under or
35 inner surface with a central slightly wedge-shaped extending boss having an internal recess, and also upon its inner surface and near its ends with pointed spurs, the boss and spurs being designed for driving into the wood
40 of the felly.

Referring to the drawings, Figure 1 is a perspective of a felly-section provided with a spoke constructed in accordance with my invention. Fig. 2 is a transverse section.
45 Fig. 3 is a longitudinal section. Fig. 4 is a longitudinal section on the felly.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I form a casting
50 or socket 1, the same consisting of a central substantially flat body portion 2, provided at its

sides and at a right angle thereto with embracing flaps or wings 3, and intermediate its sides and ends, and upon the outer surface of the body 1, I form a central outwardly-projecting
55 boss 4, having a cylindrical socket 5, the bottom of which is in about the same plane as the outer surface of the body portion 2, said socket being of a size adapted for the reception of the outer end of an ordinary spoke, and the length
60 of the boss from the outer surface of said body portion 2 being slightly over a quarter of an inch, whereby the casting as a whole is especially adapted for certain purposes hereinafter apparent.

65 From the inner surface of the casting, intermediate the two wings 3 and projecting from said surface, is formed an integral collar or boss 6, centrally recessed, as at 7, the end of the recess being preferably in about
70 the same plane as the inner surface of the body portion 2, said collar 6 being considerably smaller than the socket 4, and having the outer surface of its wall slightly inwardly inclined, as at 8, whereby a sharp annular
75 entering-edge 9 is formed at the end of the collar.

Upon the inner surface of the body portion 2 and near each end are formed projecting
80 spurs 10, adapted to be driven into the inner edge of the felly and in conjunction with the collar or boss 6, to retain the socket against displacement laterally.

The operation of my invention will be at once apparent; but to enable the same to be
85 thoroughly understood it will be briefly stated as follows: A wheel, as A, having spokes B and rims C, as shown in Fig. 1, has, from use and by reason of the wearing away and rotting of its spoke B, become parted and use-
90 less. Without the necessity of any unusual or special tool, and without the necessity of any special skill, the spoke may be slightly strained laterally at a point opposite its socket, and the casting 1 mounted thereon,
95 so that its flaps 3 embrace the sides of the felly and the inner extending collar 6 registers with and is received by the original spoke-socket, which collar is of a length slightly greater than the original depth of said socket,
100 whereby the casting may be, by hammer or other tool, driven snugly upon the felly, the

wood of said felly taking within the bore or recess 7 of the collar 6, and the spurs 10 of said casting entering the felly at diametrically-opposite points with relation to the collar 6. Now, by springing the felly or rim slightly out, the outer end of the spoke B may be entered in the recess 5 of the collar 4, and by a few blows of the hammer upon the rim opposite the spoke said spoke will become firmly seated in the collar 4, and in this manner the requirement of a new spoke will be obviated and the wheel rendered as strong and as serviceable as before.

I am aware that previous to my invention there have been in use spoke-sockets similar to my own—that is to say, they embody the body portion, the spoke-receiving socket, and the opposite felly-embracing flaps. In this construction also there was provided an intermediate depending perforated boss. The socket referred to, however, was adapted to be employed in the original construction of the wheel, and not as my invention, for a reconstruction or repairing of the same, nor could it be so used, for the reason that the spoke-receiving collar was made so long as to render it an impossibility for a wheel-rim to be sprung outward sufficiently far to permit of the insertion of the end of a spoke. Furthermore, the central inwardly-extending perforated boss mentioned in the construction referred to was intended for the reception of a binding-screw inserted through the outer surface of a felly and only terminated at the end of the spoke, thus necessitating a perforation of the boss extending throughout its length and communicating with the spoke-receiving

socket. I obviate this objection by providing the through and through perforation in the boss, through which water and sand would certainly in time procure access to the socket-boss, and thus rot away the end of the spoke and soon render the spoke, even thus connected, useless. Furthermore, the central boss referred to was not provided with an outer inclined wall adapted for driving into the felly, and its interior bore being screw-threaded was occupied by a binding-screw and prevented the wood of the felly from entering the bore and serving as a means for maintaining the casting in position.

Having thus described my invention, what I claim is—

The combination, with the felly having the spoke-tenon opening and the tenonless spoke, of the herein-described socket formed in a single casting and consisting of the plate 2, having the inwardly-extending felly embracing flaps 3 intermediate the same, the annularly-recessed boss 4, longer than the tenon-receiving recess of the felly terminating in a beveled entering-edge driven into the bottom of the tenon-socket of the felly, and further consisting of the shallow spoke-receiving boss 4, into which is sprung the end of the spoke, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

URIAL M. HASKINS.

Witnesses:

ALBERT T. FALVEY,
JAMES MOTTRAM.