

(No Model.)

F. E. KAUFFMANN.
SPOKE SOCKET.

No. 422,797.

Patented Mar. 4, 1890.

Fig. 2.

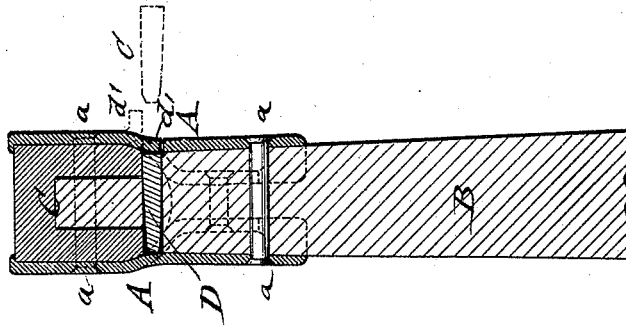
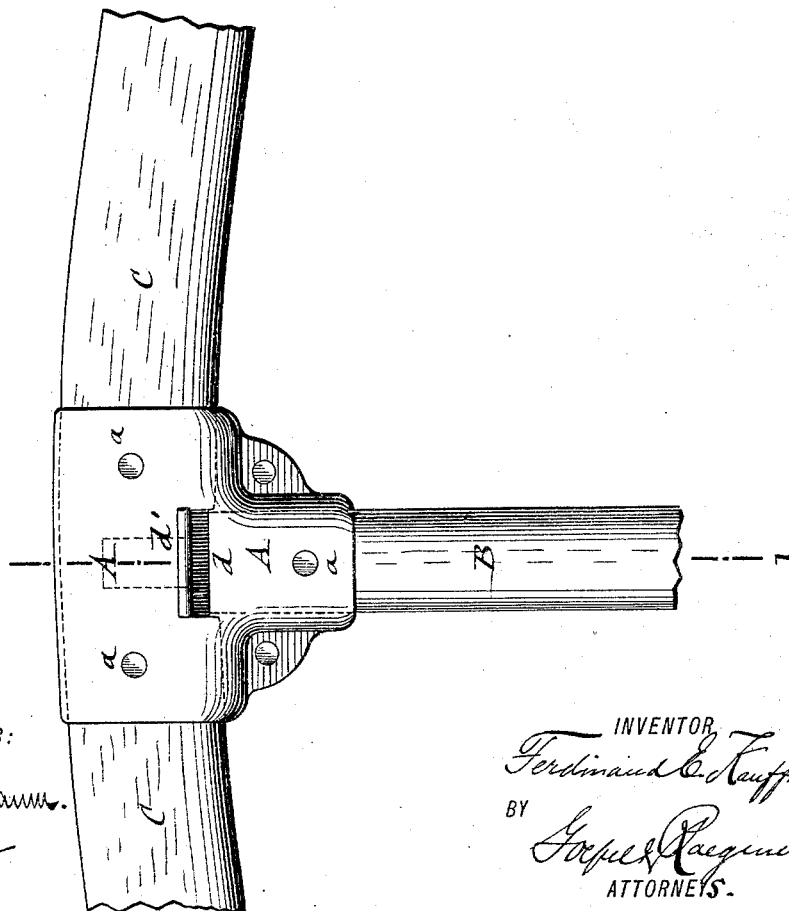


Fig. 1.



WITNESSES:

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SPOKE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 422,797, dated March 4, 1890.

Application filed August 31, 1889. Serial No. 322,603. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND E. KAUFFMANN, of Elizabeth, in the county of Union and State of New Jersey, a citizen of the United States, have invented certain new and useful Improvements in Spoke-Sockets, of which the following is a specification.

This invention relates to an improved spoke-socket of that class which is used for repairing the spokes when they get broken at their connection with the felly, said sockets permitting the quick repairing of a wheel without removing the tire, so that it can be made serviceable at comparatively small expense and in a very effective manner; and the invention consists of a spoke-socket for connecting a broken spoke with the felly, said socket being formed of two plates which extend at their inner ends around the spoke and at their outer ends over the felly. One of the retaining-plates is provided with a transverse recess for inserting a wedge-shaped key, that is driven in between the felly and the broken end of the spoke, so as to fill up the space formed at the broken end of the spoke and produce the tight connection of the same with the felly.

In the accompanying drawings, Figure 1 represents a side elevation of my improved spoke-socket before the wedge-key is applied; and Fig. 2 is a longitudinal section of the same on line 1 1, Fig. 1, showing the wedge-key in dotted lines before insertion and in full lines after insertion.

Similar letters of reference indicate corresponding parts.

My improved spoke-socket is formed of two plates A A, which are made semicircular at the inner ends, so as to fit around the broken end of the spoke B next to the felly C, while the remaining part is made flat and provided with inwardly-projecting tapering ledges, so as to fit tightly to the felly. The plates A A are tightly fastened by means of pins *a* to the spoke and felly, and serve for the purpose of repairing the wheel when the spoke is broken at its point of connection with the felly.

The construction so far described is old and well known, and I lay no claim to the same.

My improvement consists in providing one of the plates A with a transverse slot *d* and

inserting into the same a wedge-key D, which is driven in between the broken end of the spoke and the felly, so as to fill up the space formed between the end of the spoke and the felly and keep thereby both the spoke and felly in their proper position without wobbling or changing its position. Without the wedge-key the spoke-socket is not sufficiently effective, inasmuch as the spoke would not be properly sustained at the end next to the felly. Such a spoke-socket soon gets loose and permits the parts to wobble, whereby the usefulness of the spoke-socket is at an end. This I have entirely avoided by the introduction of my transverse wedge-key D, which tightens up the felly and firmly holds the spoke in its relative position toward the hub and the felly. After the wedge-key C is driven in, a bent-up flange *d'* is turned down over the slot *d*, so as to close the same and prevent the detaching and loss of the key. This flange is made integral with and bent up from the plate A of the spoke-socket before the same is applied.

The spoke-socket can be readily applied to a broken spoke of any wheel, and thereby its connection with the felly restored in a quick and effective manner, and without the trouble of taking off the tire, removing the felly, and replacing the broken spoke by a new spoke. Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of a felly and spoke of a wheel with socket-plates attached to opposite sides of the felly and spoke, one of said plates being provided with a transverse slot, and a bent-up flange alongside of said slot, and a wedge-key driven into said slot, so as to fill up the space between the end of the spoke and the felly, said flange being turned down to close the slot when the wedge-key is driven home, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FERDINAND E. KAUFFMANN.

Witnesses:

HENRY HUBER,

JOHN ALONZO STRALEY.