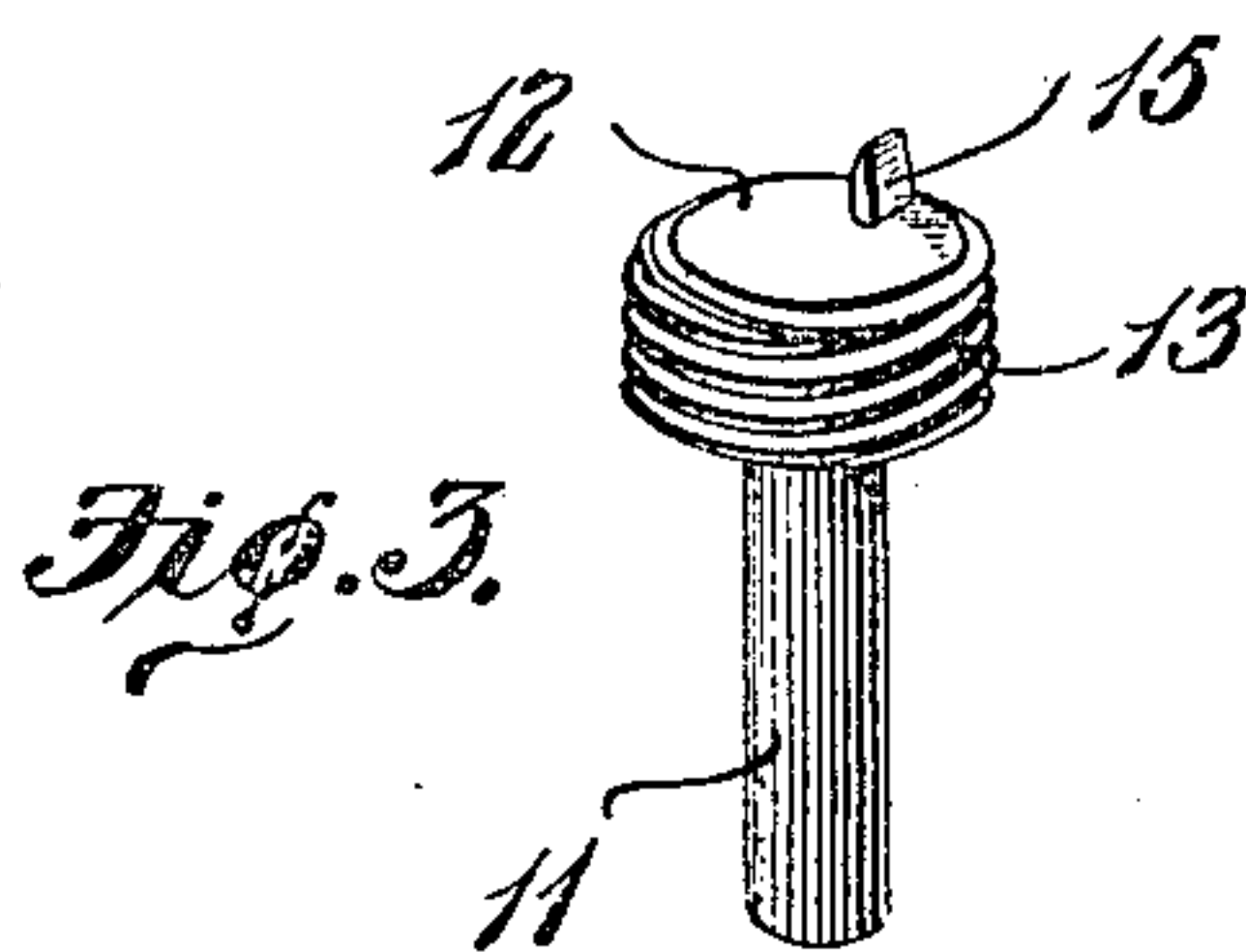
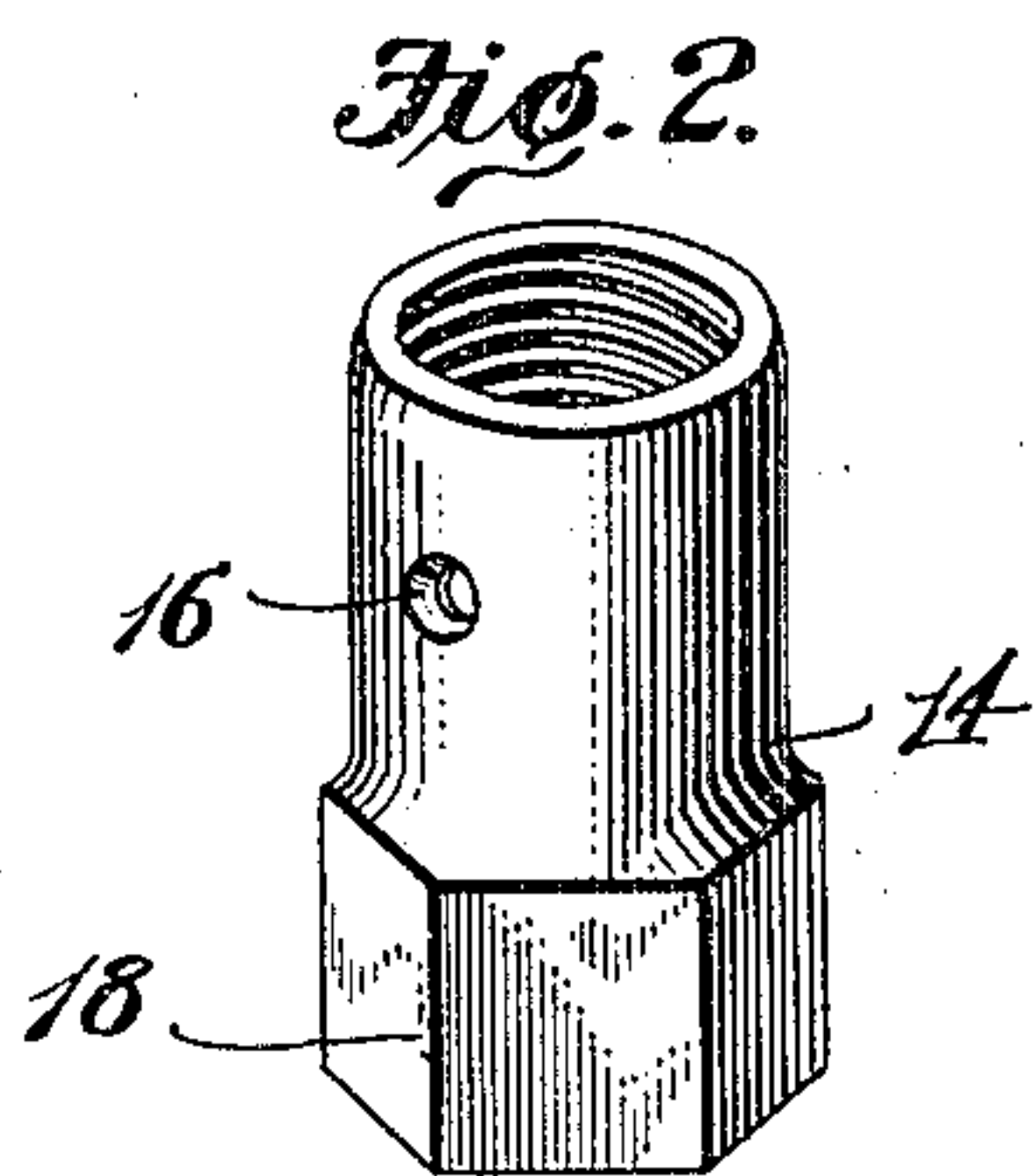
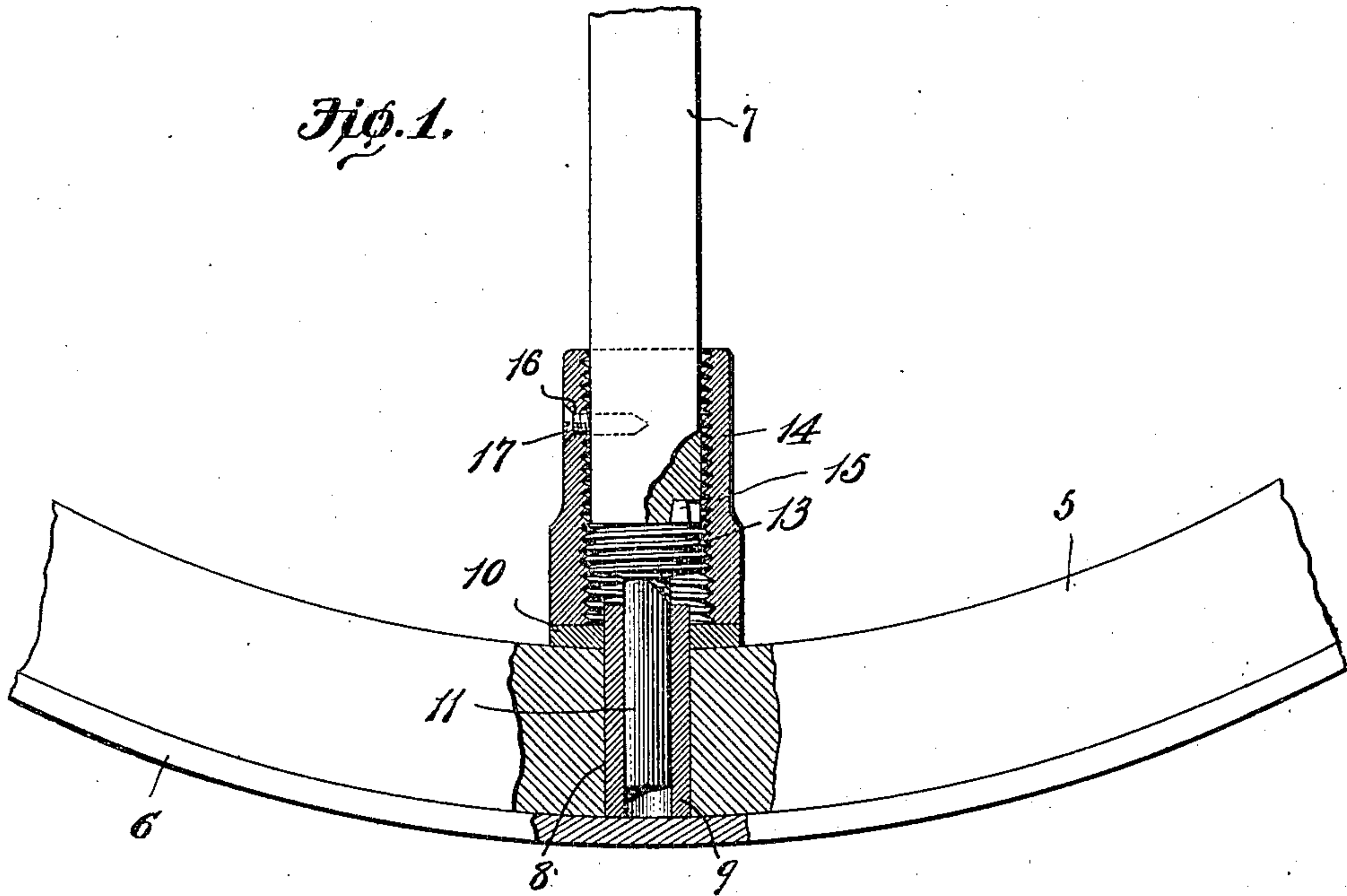


No. 837,581.

PATENTED DEC. 4. 1906.

D. W. ORCUTT.  
SPOKE SOCKET.

APPLICATION FILED MAY 12, 1906.



*David W. Orcutt,*

INVENTOR

WITNESSES:

*E. J. Stewart*  
*L. T. McKee*

By

*C. A. Snow & Co.*

ATTORNEYS



# UNITED STATES PATENT OFFICE.

DAVID W. ORCUTT, OF PAINTED POST, NEW YORK.

## SPOKE-SOCKET.

No. 837,581.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed May 12, 1906. Serial No. 316,561.

*To all whom it may concern:*

Be it known that I, DAVID W. ORCUTT, a citizen of the United States, residing at Painted Post, in the county of Steuben and State of New York, have invented a new and useful Spoke-Socket, of which the following is a specification.

This invention relates to spoke-sockets, and has for its object to provide a comparatively simple, inexpensive, and efficient device of this character by means of which the spokes of a vehicle-wheel may be tightened and broken spokes repaired without the necessity of cutting the felly or setting the tire.

A further object of the invention is to provide a pin, one end of which is seated in a tubular member carried by the felly of a wheel, while the opposite end thereof is provided with an enlarged head having a terminal lug or spur for attachment to the broken end of the spoke, said head being threaded for engagement with an adjusting collar or sleeve, whereby when the sleeve is rotated the spoke will be forced to its seat in the hub of the wheel, and thus effect the tightening of the same.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability, and efficiency, as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, it being understood that various changes in form, proportions, and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal sectional view of a portion of a vehicle-wheel, showing a spoke-socket constructed in accordance with my invention in position thereon. Fig. 2 is a perspective view of the adjusting-sleeve detached, and Fig. 3 is a similar view of the threaded pin.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved device may be used in connection with different styles of vehicle-wheels, and by way of illustration is shown

applied to a vehicle-wheel of the ordinary construction, in which 5 designates the felly, 6 the tire, and 7 one of the spokes.

The felly is provided with a transverse opening or recess 8, in which is seated a tubular member or socket 9, one end of which is extended beyond the inner face of the felly to form a bearing for a plate or washer 10.

Seated in the tubular member 8 is a pin 11, provided with an enlarged head 12, the walls of which are threaded at 13 for engagement with the interior threads of an adjusting sleeve or collar 14. The head 12 is provided with a vertically-disposed attaching spur or lug 15, preferably arranged eccentric to the longitudinal axis of the pin 11 and adapted to be driven or otherwise embedded in the adjacent end of the spoke 7, so as to prevent independent movement of the latter.

The spoke 7 is seated in one end of the sleeve 14, while the opposite end of the sleeve bears against the plate or washer 10, so that by rotating the sleeve the head 13, together with the spoke, will be moved longitudinally of the socket 8, and thus force the opposite end of the spoke to its seat in the hub of the wheel, and thereby effect the tightening of said spoke without the necessity of cutting the felly or setting the tire.

As a means for locking the spoke in adjusted position the sleeve 14 is provided with a transverse opening or aperture 16 for the reception of a screw or similar fastening device 17, the point of which is adapted to pierce the walls of the spoke and lock the same in adjusted position.

In operation the tubular member 8 is seated in the opening in the felly with the washer 10 bearing against the inner face of said felly, after which the pin 11 is seated in the socket 8 and the sleeve 14 inserted over the end of the broken spoke, the latter having been previously cut off at the desired length. The sleeve is then moved longitudinally on the spoke 7 until the interior threads thereof engage the threads on the head 13, after which the sleeve is rotated by gripping the squared portion 18 thereof with a wrench or other suitable tool. As the sleeve 14 is rotated the head 13 will be moved longitudinally of the socket 8 until the spur 15 pierces the broken end of the spoke, a further movement of the sleeve causing the pin and spoke to be adjusted longitudinally, and



thus force the spoke to a seat in the hub. After the desired adjustment has been effected the screw 17 is inserted in the opening 16, so as to pierce the spoke 7, and thus lock the latter in adjusted position.

While the socket is shown applied to the felly of the wheel, it is obvious that the same may be used with equally good results on the hub of said wheel and that a clamping-collar or similar device may be used for locking the spoke in adjusted position in place of the clamping-screw.

From the foregoing description it is thought that the construction and operation of the device may be readily understood by those skilled in the art, and further description thereof is deemed unnecessary.

Having thus described the invention, what is claimed is—

1. The combination with a spoke, of a felly, a tubular member seated in the felly, a pin engaging the tubular member and provided with an enlarged head the walls of which are threaded, a spur carried by the pin and adapted to pierce the adjacent end of the spoke, a threaded sleeve adapted to engage the head of the pin for adjusting the latter longitudinally, and means carried by the sleeve for engagement with the spoke.

2. The combination with a spoke, of a felly, a tubular member seated in the felly, a

pin engaging the tubular member and provided with an enlarged head the walls of which are threaded, a spur carried by the head and adapted to pierce the adjacent end of the spoke, a threaded sleeve engaging the threads on the head for adjusting the same longitudinally of the socket, and a bearing-plate interposed between the adjacent end of the sleeve and felly.

3. The combination with a spoke, of a felly, a tubular member seated in the felly and having one end thereof extended beyond the inner edge of the felly, a pin seated in the tubular member and having its opposite end provided with an enlarged head the walls of which are threaded, a sleeve engaging the threads on the head, a spur disposed eccentric to the longitudinal axis of the pin and adapted to pierce the adjacent end of the spoke, a screw carried by the sleeve for engagement with the spoke, and a bearing-plate interposed between the sleeve and the felly and engaging the extension of the tubular member.

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

DAVID W. ORCUTT.

Witnesses:

OTTO COBB,

D. VAN DUSEN.