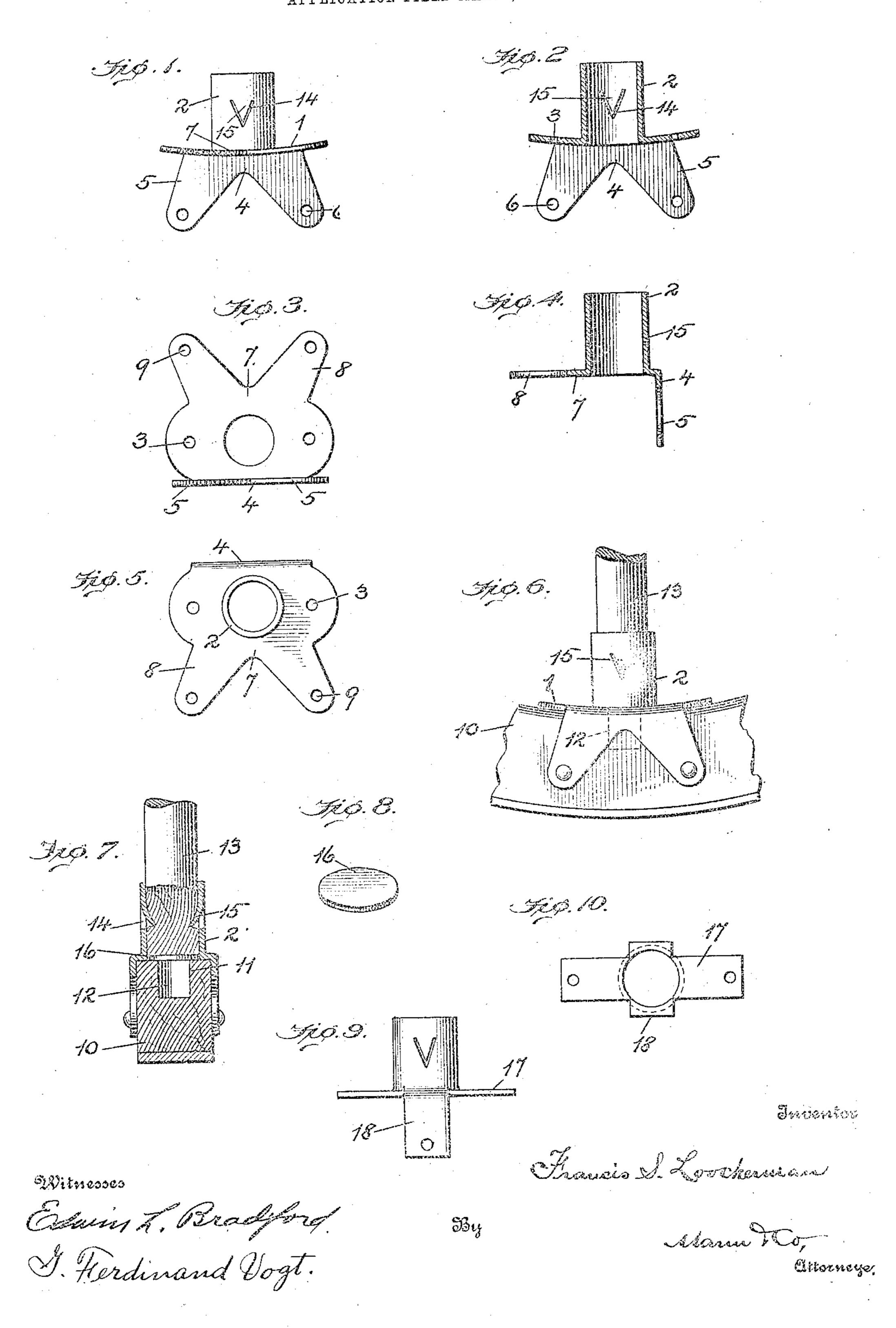
## F. S. LOOCKERMAN. SHEET METAL SPOKE SOCKET. APPLICATION FILED MAR. 9, 1908.



## UNITED STATES PATENT OFFICE.

FRANCIS S. LOOCKERMAN, OF UPPER FAIRMOUNT, MARYLAND.

SHEET-METAL SPOKE-SOCKET.

No. 896,735.

Specification of Letters Patent.

Paténteu Aug. 25, 1908.

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To all whom it may concern:

Be it known that I, Francis S. Loocker-MAN, a citizen of the United States, residing at Upper Fairmount, in the county of Somer-5 set and State of Maryland, have invented certain new and useful Improvements in Sheet-Metal Spoke-Sockets, of which the following is a specification.

This invention relates to improvements in 10 spoke sockets and has particular reference to a socket of improved construction that may be stamped from a metal blank thus enabling the same to be produced at a minimum cost without sacrificing strength and durability.

The object of the invention is to provide a strong and durable socket that may be readily attached to a wheel to rigidly connect a broken spoke with the rim of the wheel and thus enable a quick repair of a spoke to be

20 made at a minimum cost.

The invention is illustrated in the accompanying drawing in which,—Figure 1 shows a side elevation of the improved socket. Fig. 2, a vertical longitudinal section through the 25 same. Fig. 3, a bottom plan view of the socket. Fig. 4, a vertical cross-section thereof. Fig. 5, a top plan view. Fig. 6, a side elevation of a portion of a wheel rim and spoke with the improved socket connecting 30 the two. Fig. 7, a vertical cross-section through the rim at one of the broken-off tenons, and also through the socket plate and lower end of the spoke. Fig. 8, illustrates in perspective one of the detached washers or 35 socket plates. Fig. 9, shows a side elevation of a slightly modified form of socket embodying the features of the invention, and Fig. 10, shows a bottom plan view of the latter.

Referring to the drawing the numeral, 1, 40 designates a plate or base portion having a laterally-projecting tubular socket, 2, which is formed integrally with the base portion and which is open at both its upper and 45 this tubular socket may vary to suit the shape of the spoke it is to receive but in the

present instance it is circular.

The plate or base portion is slightly curved in a longitudinal direction to conform to the 50 shape of the rim of the wheel to which it is to be attached, and at opposite sides of the tubular socket said base may be provided with perforations, 3, for a purpose to be described.

At one longitudinal side edge, the plate or

base portion, 1, is provided with a depending flange, 4, and by preference this flange is provided with downwardly-inclined spacedapart legs, 5, which are provided with perforations, 6. The opposite longitudinal side 60 edge of the plate is provided normally with a laterally-projecting flange, 7, which, prior to the application of the socket to a wheel rim, is flush with and extends horizontally from the plate or base. This flange, 7, is also pro- 65 vided with legs, 8, having perforations, 9.

The rim, 10, of the wheel is provided with the usual mortise indicated by the numeral, 11, in Fig. 7, in which the tenon, 12, of the spoke, 13, is originally driven. These tenons 70 break off in the mortise and the spoke must then either be replaced or repaired and the object of my invention is to provide a socket which may be readily placed over the lower end of the broken spoke and then fitted by 75 bending it around and securing it to the rim thus enabling a quick and permanent repair of the broken spoke to be made.

The tubular socket, 2, may be provided with inclined slits, 14, which form tangs, 15, 80 so that after the socket is in place and connected with the rim the tangs, 15, may be driven inwardly into the spoke and aid in making a rigid connection between the spoke and socket.

Before the socket and spoke are fitted to the rim, 10, I insert a metal disk or washer, 16, in the lower end of the socket beneath the spoke so that when in place on the rim the pressure of the spoke will not be directly 90 upon the broken off tenon, 12, but will be distributed on the inner circumference of the rim. By inclining the legs, 5, and, 8, I cause the latter to take against the rim at opposite sides of the mortise, 11, where the rim is 95 solid and rigid fastening may be made.

In the device shown in Figs. 9 and 10 the socket is formed from a single plate,—the lower ends. The cross-sectional shape of tubular portion first being punched from one side thereof and the remaining flat portions 100 of the plate between the horizontal and vertical legs, 17, and, 18, cut away. A base plate or washer is fitted inside of the tube. adjacent to the lower end so as to cover the broken-off tenon in the wheel rim. In this 105 form of device both horizontal and vertical legs are provided with perforations and the legs being disconnected from each other are elastic and very readily bent to fit the shape of the rim to which they are to be secured. 110

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

1. A sheet-metal repair spoke socket 5 stamped from a single plate comprising a base having perforations at opposite ends thereof with a tubular socket projecting upwardly therefrom between said perforations and open at both ends and the opening in 10 said tubular socket having a uniform diameter from end-to-end, and said base also having perforated rim-engaging flanges that project laterally from opposite sides of the tubular socket and having perforated legs to be 15 secured to the vertical sides of the wheel rim, and a metal plate in the lower open end of the tubular socket to extend over the brokenoff tenon in the wheel rim.

2. A sheet-metal spoke socket stamped from a single blank and having a base plate 20 with perforated opposite ends and a socket projecting laterally therefrom and having a passage of uniform diameter extending through the socket and opening at opposite ends thereof,—said socket also having spoke 25 engaging devices in its side walls and perforated legs extending laterally from opposite sides of the inner open end of the socket for attachment to the vertical sides of the wheel rım.

In tesumony whereof I affix my signature in presence of two witnesses.

FRANCIS S. LOOCKERMAN.

Witnesses:

CHARLES B. MANN, Jr., G. FERDINAND VOGT.