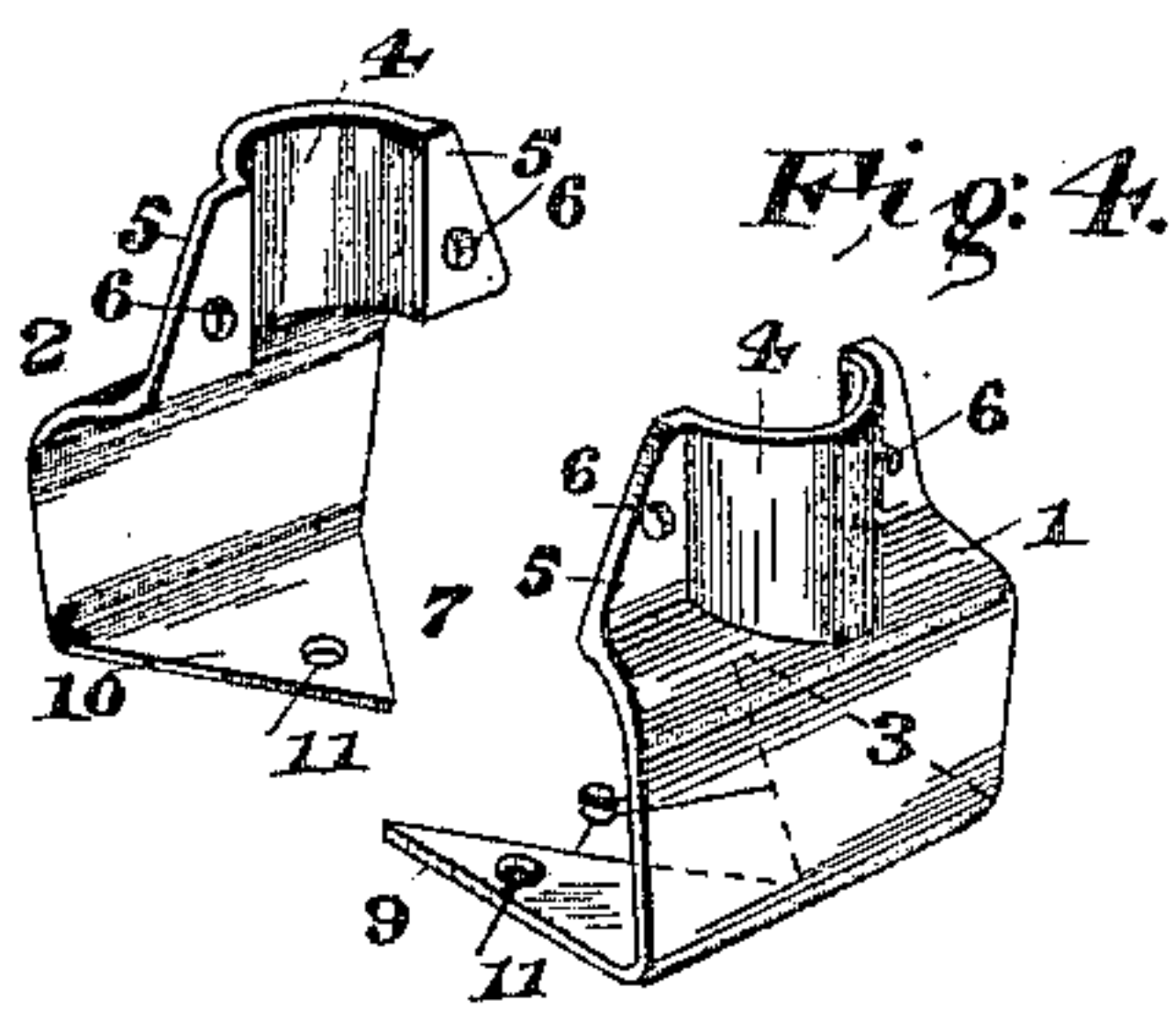
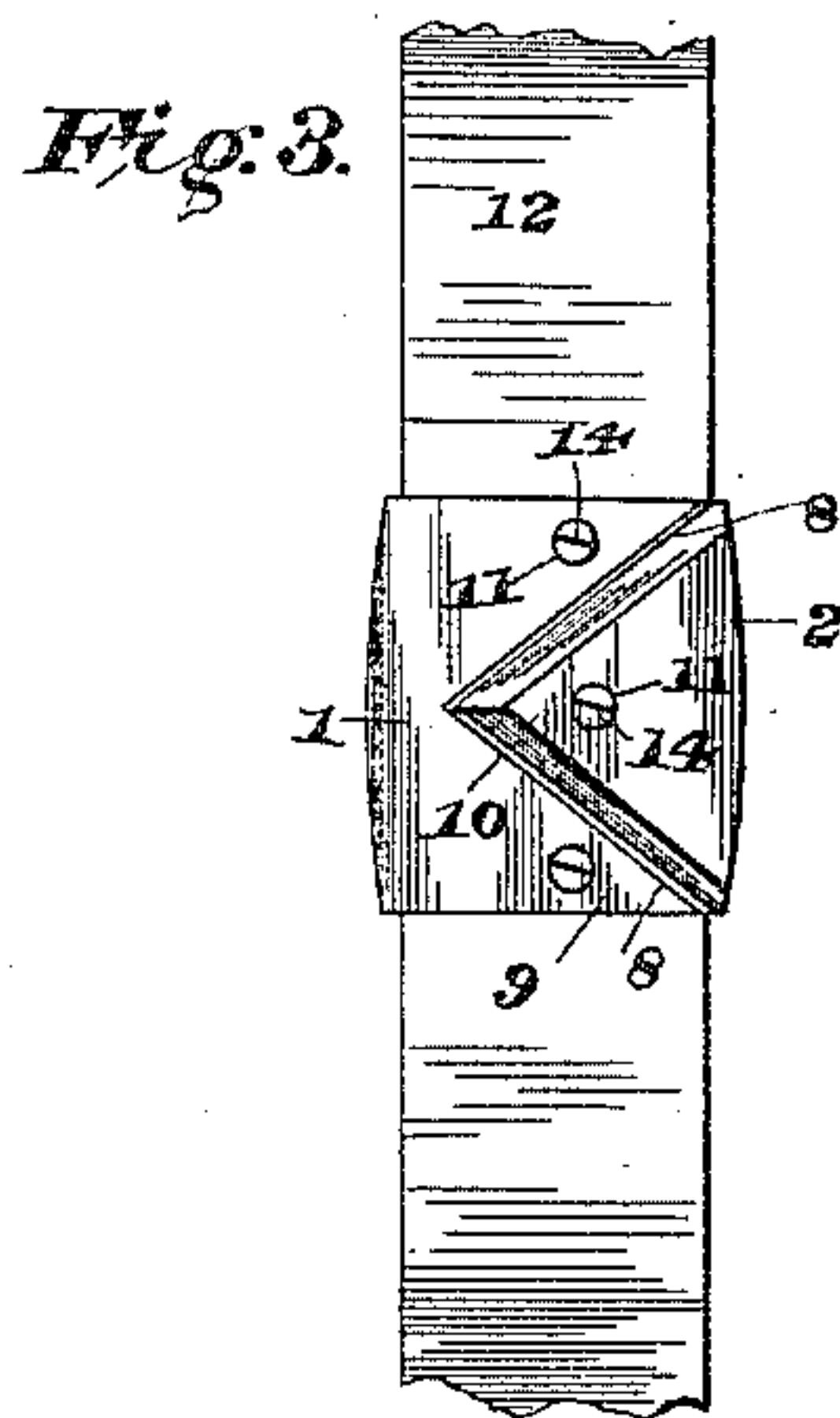
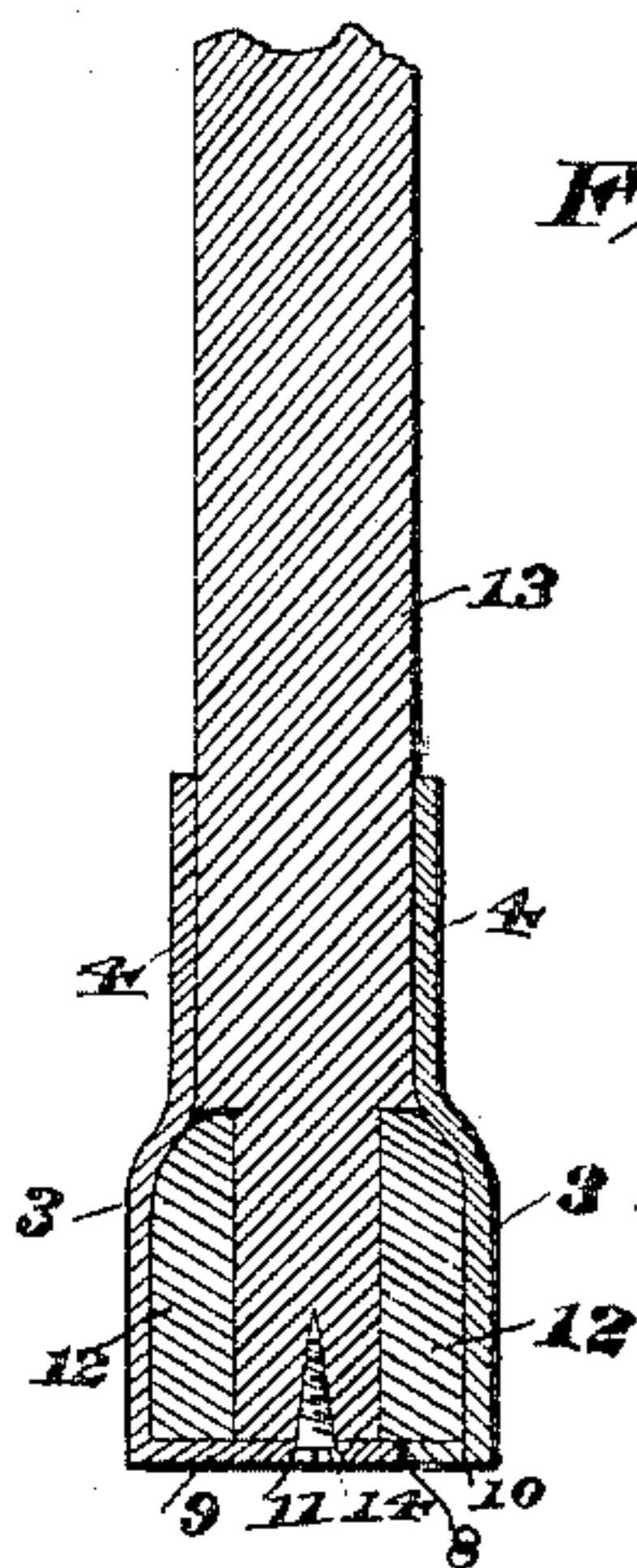
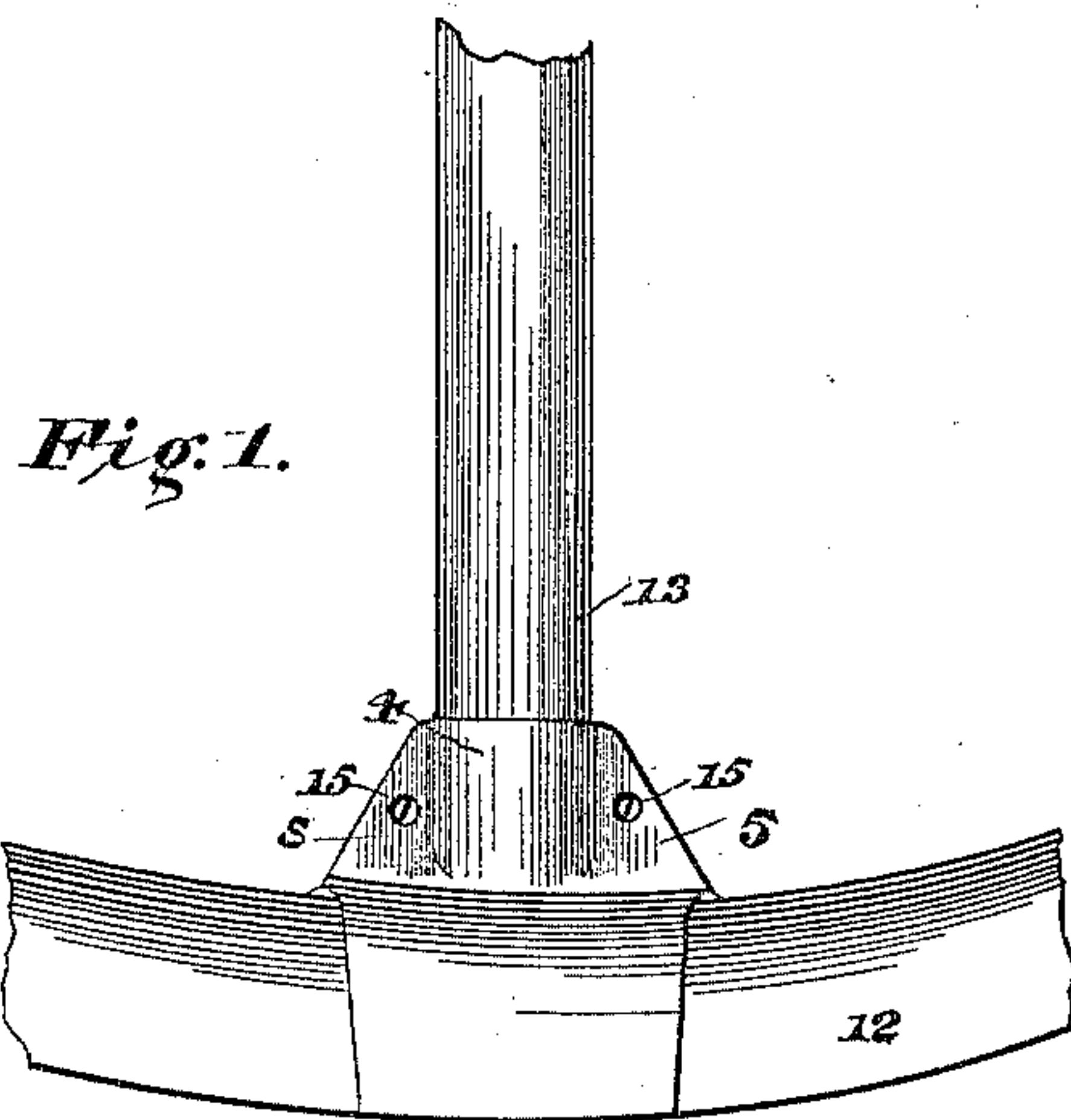


(No Model.)

J. WATSON.
SPOKE SOCKET.

No. 436,681.

Patented Sept. 16, 1890.



Witnesses:

B. F. Ober

W. J. Duval

By *his* Attorneys,

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Inventor

Joseph Watson

UNITED STATES PATENT OFFICE.

JOSEPH WATSON, OF CINCINNATI, OHIO.

SPOKE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 436,681, dated September 16, 1890.

Application filed June 27, 1890. Serial No. 356,982. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WATSON, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Spoke-Socket, of which the following is a specification.

This invention has relation to spoke-sockets; and the objects of the invention are to provide a socket adapted to be applied to the outer ends of the spokes of wheels, either at the time of constructing the wheel or subsequently thereto, when the wheels become worn at the points of entrance of the spokes in the rims or fellyes.

It is well known that the weakest points of a wheel, and the points most liable to give out or become worn, are the points of entrance of the spokes at their outer reduced or tenoned ends into the rims or fellyes, and in order to strengthen these points and repair the same without the expense of substituting a new spoke many devices have been invented and employed. All, however, coming under my observation are open to more or less objection for various reasons, and more especially for the reason that they are not adapted for a ready application to broken wheels by inexperienced persons, thus necessitating the employment of a practical wheelwright for the purpose of repairing the wheel and also the loss of use of the vehicle, to say nothing of the attending expense, inconvenience, &c.

By my invention, as will hereinafter appear and be particularly pointed out in the claims, it will be seen that I provide a simple and convenient device, adapted to be applied either at the time of constructing the wheel or subsequently at the time of breakage, and in the latter instance with facility and by inexperienced hands, thus overcoming the many objections heretofore enumerated.

Referring to the drawings, Figure 1 is an elevation of a spoke and a portion of a felly, the two being connected and provided with a socket constructed in accordance with my invention. Fig. 2 is a transverse view; Fig. 3, an edge elevation of the wheel; Fig. 4, a perspective of the two socket-sections, the same being disconnected and ready to be applied.

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

In practicing my invention I construct the socket in two halves or sections, which, for the purpose of convenience I will herein designate as the "internal section" 1 and the "external section" 2. Each of these sections is formed, preferably, of malleable iron, but may be formed of brass, either sheet or cast, or of other suitable metal.

The sections 1 and 2 comprise a central transversely-disposed rim-embracing portion 3, and above said portion a longitudinally-disposed semi-cylindrical spoke-embracing portion 4. The spoke-embracing portion 4 of the section is narrower than the felly or rim embracing portion 3, so that the latter extends beyond the former and at each side thereof. These two portions are connected by opposite webs 5, having screw-openings 6. The lower ends of the sections are each provided with inwardly-disposed flanges 7, said flanges being located at a right angle to the portions 3, so that when said portions 3 embrace the sides of the fellyes the flanges 7 embrace the periphery. As thus far described, the two sections are identical in their construction, and the only difference existing is in the formation of the flanges 7. In the section 1 this flange 7 is provided with a central angular recess 8, which leaves at opposite sides of the same triangular prongs 9. The opposite section 2 has its flange reduced at opposite edges, forming a triangular single prong 10, of a form adapted to snugly fit in the recess 8, whereby said flanges interlock when assembled at the opposite sides of a felly. Both the prongs 9 and 10 are provided with screw-openings 11.

When the sockets are applied during the construction of the wheel, the internal section 1 is applied to the inner side of the felly and the external section 2 at the opposite side, the felly 12 being snugly embraced by the curved portions 3 of the sections, and the outer end of the spoke 13 being snugly embraced by the semicircular portion 5 of the sections. Binding screws or rivets are passed through the perforations 6 of the sections, and thus the sections are rigidly connected. Screws are also inserted through the openings 11, as shown at 14, the central screw passing up into the spoke 13.

In a subsequent application of the socket

the internal section is first applied, and in so doing the pointed prongs 9 have their ends entered between the rim or felly and the tire, and are driven snugly in position, so that
5 they brace one-half of the felly and the spoke. The section 2 is next introduced into position in a similar manner, the triangular flange 10 taking into the recess 8 of the opposite flange and interlocking therewith. Binding-screws
10 15 are then inserted through the opening 6 and the two sections drawn snugly together and bound in position, thus forming a rigid connection between the spoke and rim. In this manner worn-out wheels may be repaired
15 and the connections between the spokes and the rim made stronger than ever, so that the full use of the wheel is obtained.

Having described my invention, what I claim is—

20 1. The combination, with the felly and its spoke, of the sections 1 and 2, mounted at opposite sides thereof, each of said sections comprising a central transverse embracing curved portion and an upper semi-cylindrical reduced
25 spoke-embracing portion, webs connecting said portions and having opposite threaded openings, binding-screws passed through the

perforations, the section 1 having at its lower end a right-angularly-disposed flange centrally recessed, as at 8, and forming opposite
30 triangular prongs 9, and the section 2 having triangular portion or flange 10, disposed at a right angle to the remainder of the section, and adapted to take into the recess in the flange of the opposite sections, perforations
35 formed in the prongs, and screws inserted through the prongs into the felly and spoke, substantially as specified.

2. A spoke-socket formed in opposite sections or halves and adapted to be applied to
40 the opposite sides of a rim or felly, each of said sections consisting of a felly-embracing portion, a spoke-embracing portion, and the felly-embracing portions terminating in flanges taking under the rim of the wheel and
45 said flanges interlocking, substantially as specified.

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

JOSEPH WATSON.

Witnesses:

W. H. SARGENT,
WILLIS M. KEMPER.