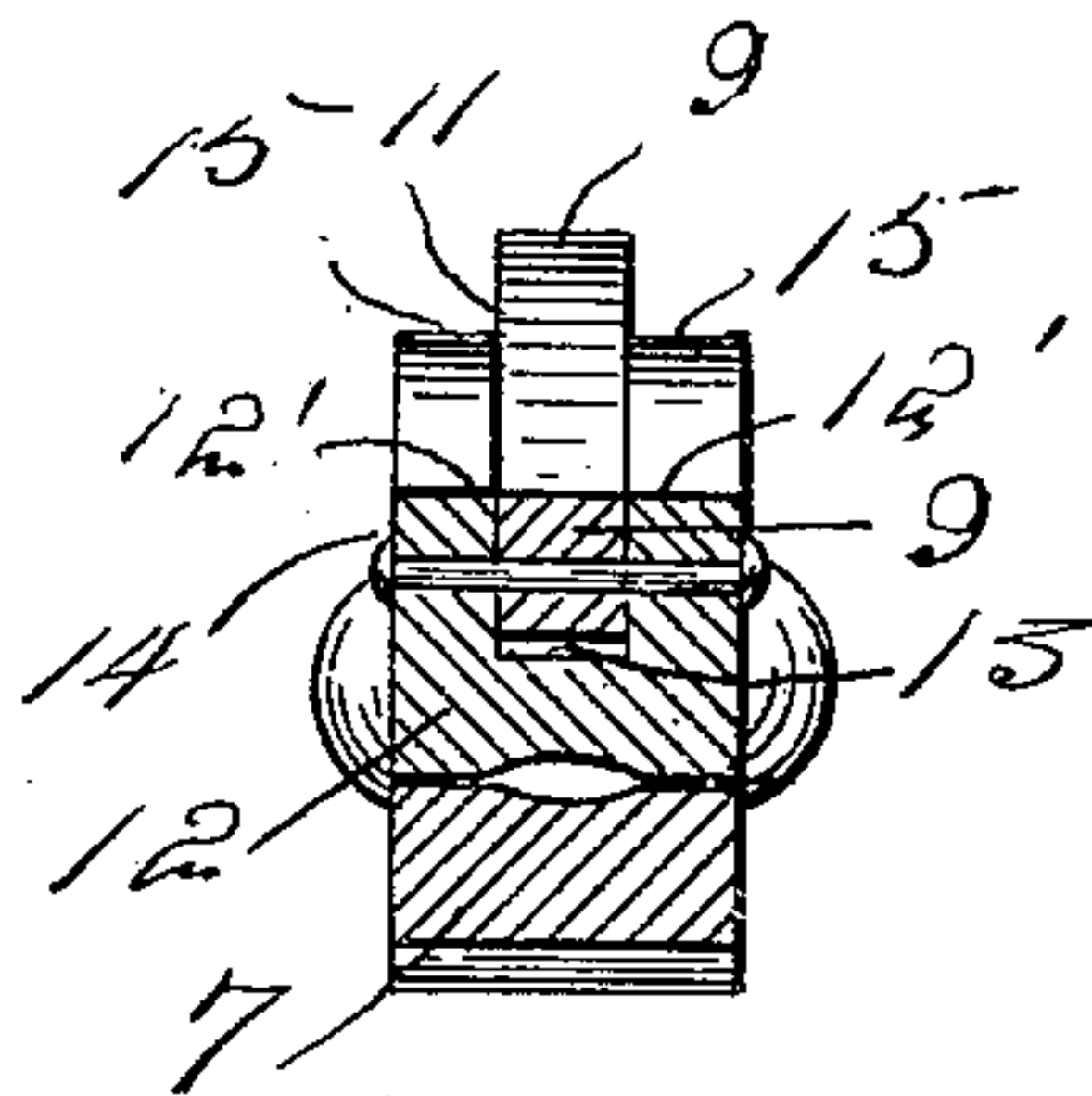
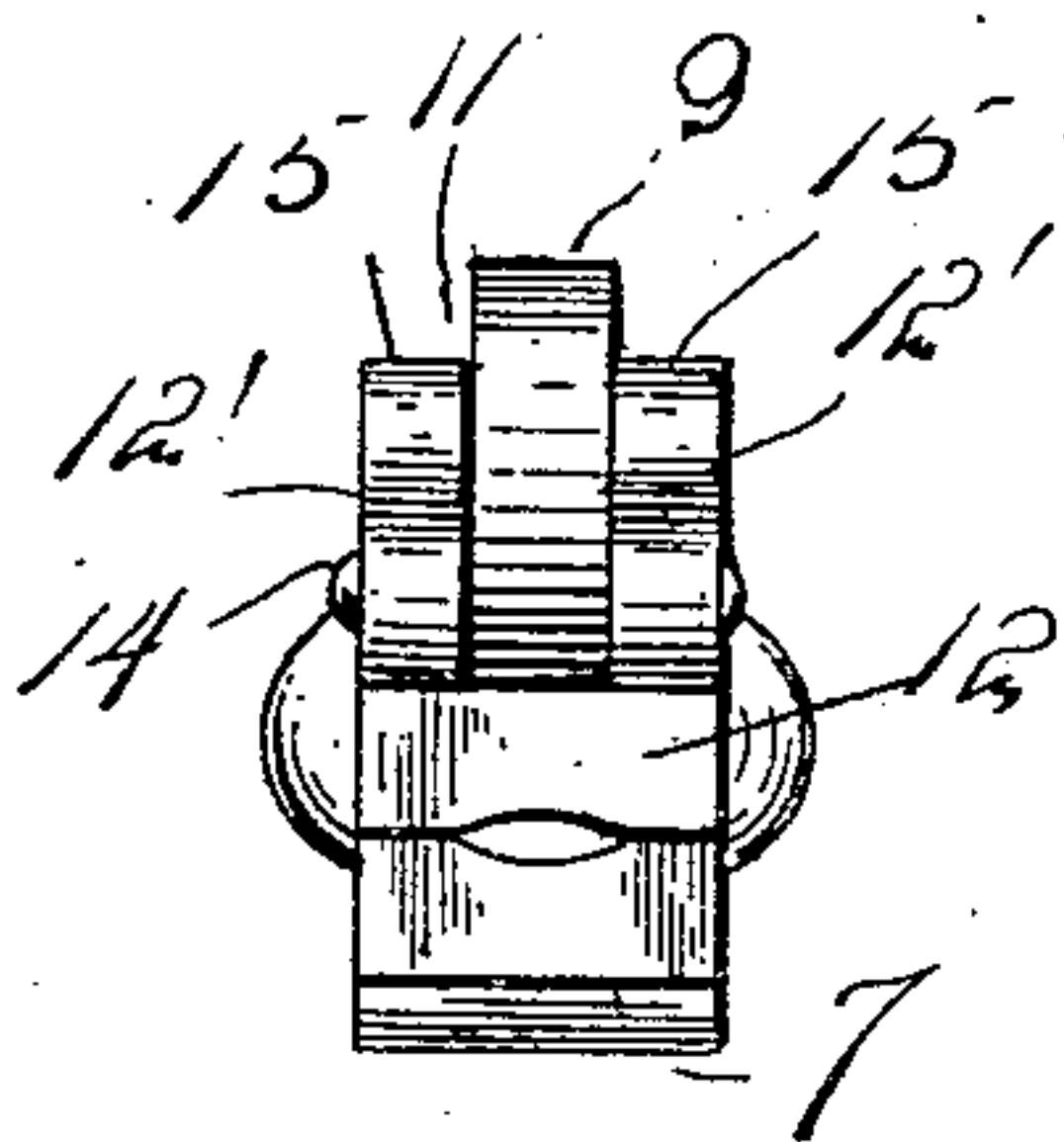
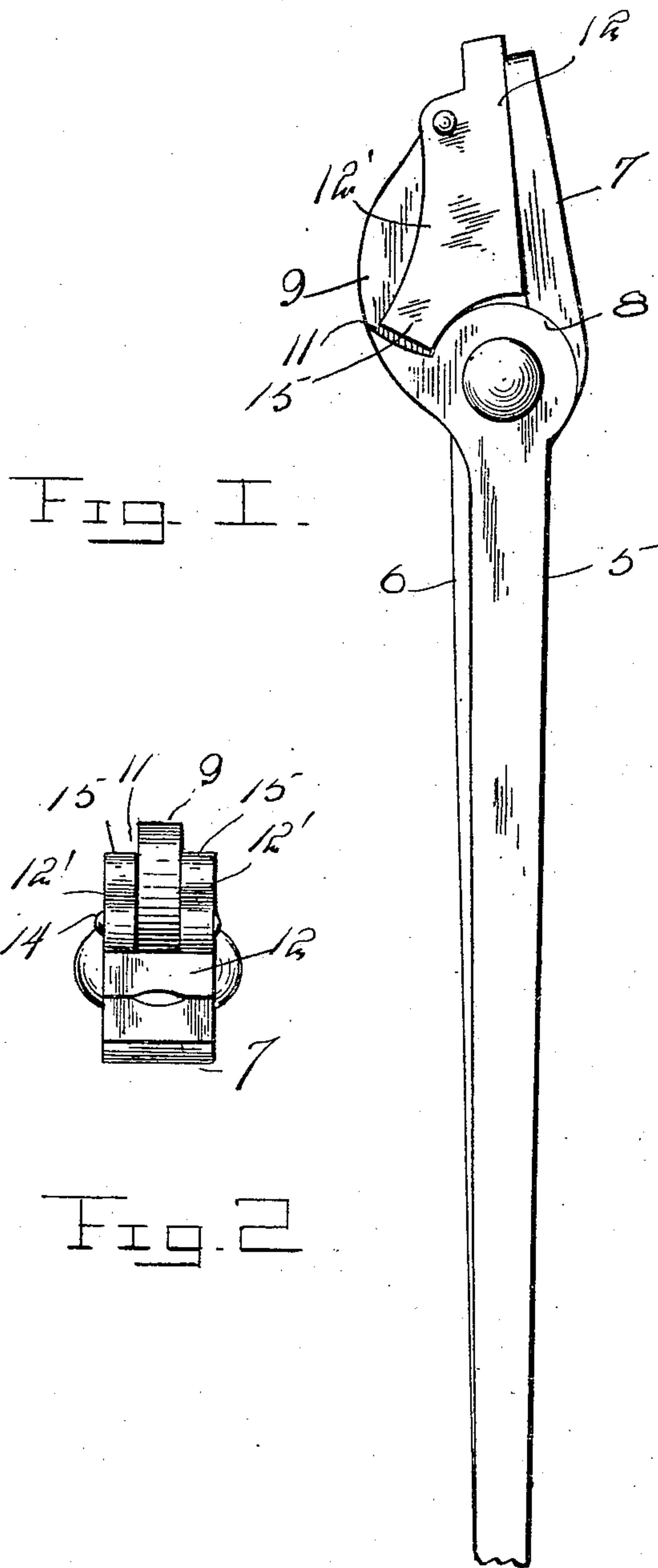


No. 875,501.

PATENTED DEC. 31, 1907.

F. L. CASPER.  
BLACKSMITH TONGS.  
APPLICATION FILED JULY 19, 1906.

2 SHEETS—SHEET 1.



Witnesses  
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2 SHEETS—SHEET 2.

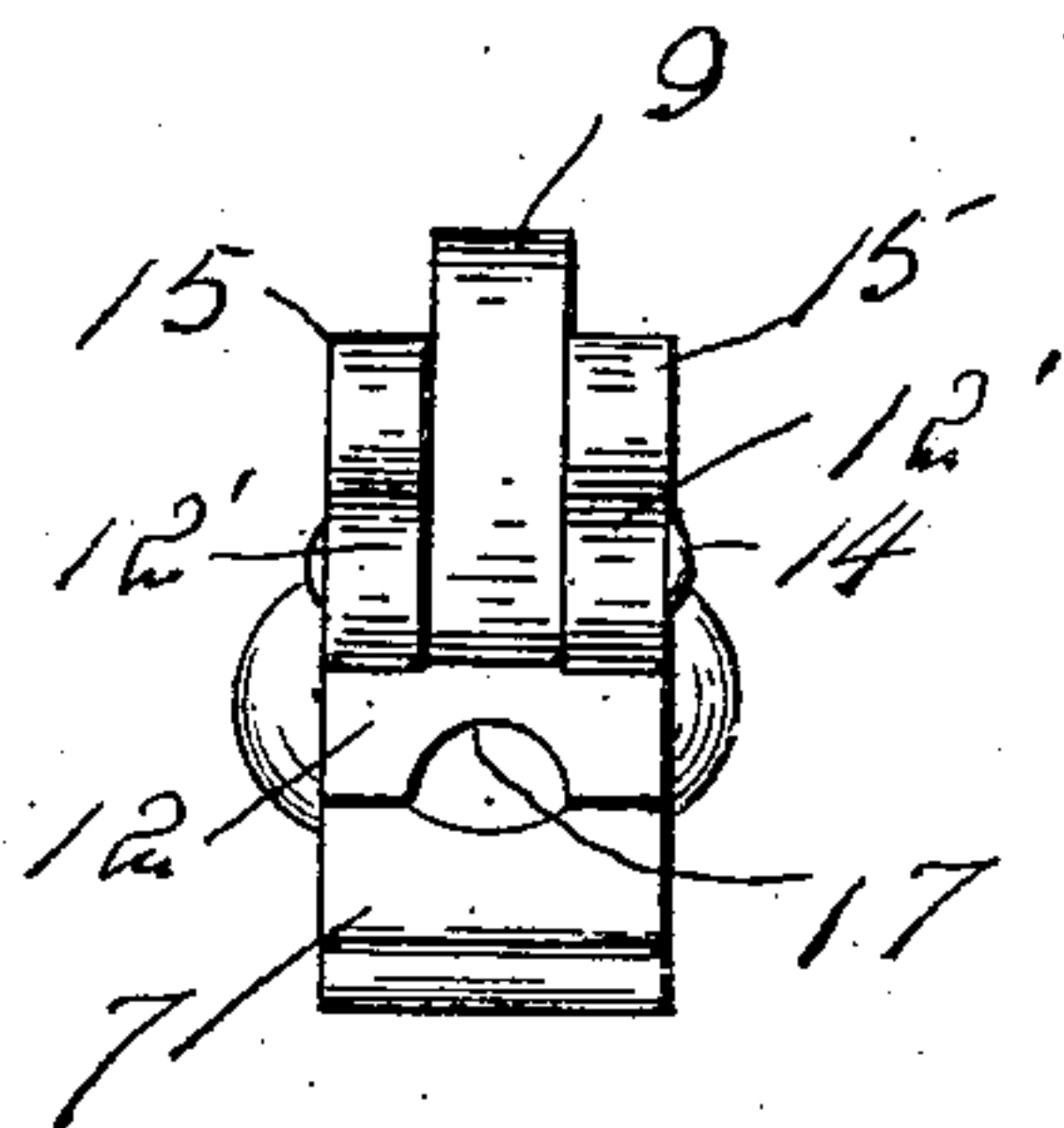


Fig. 4.

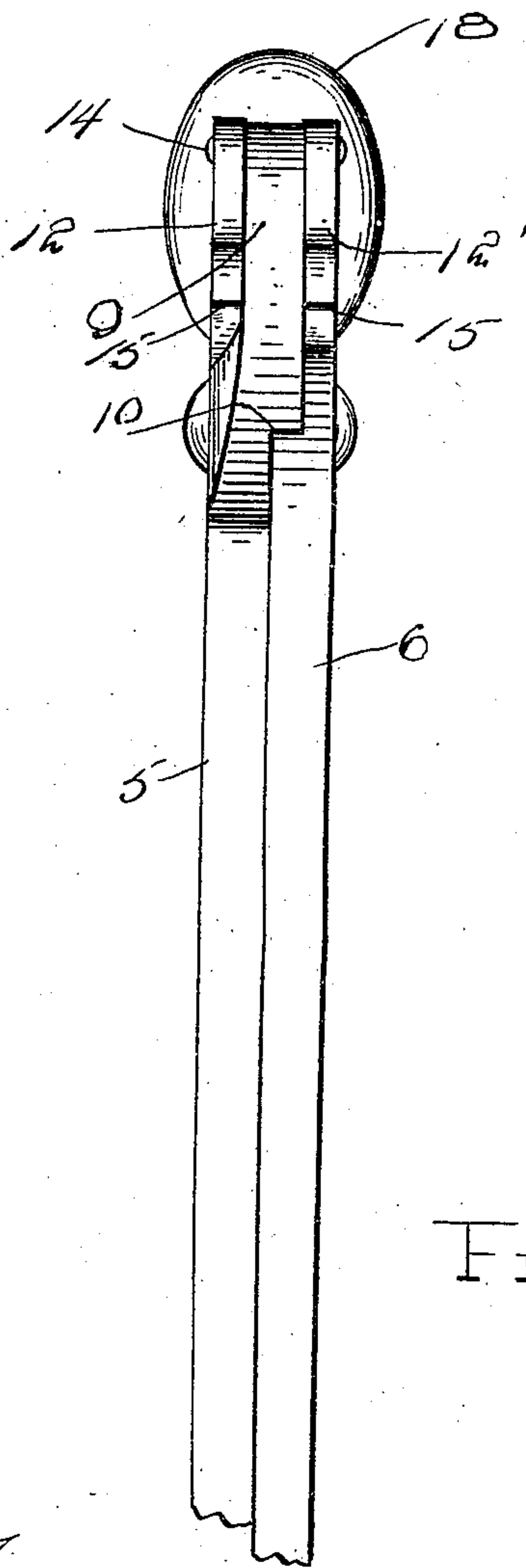
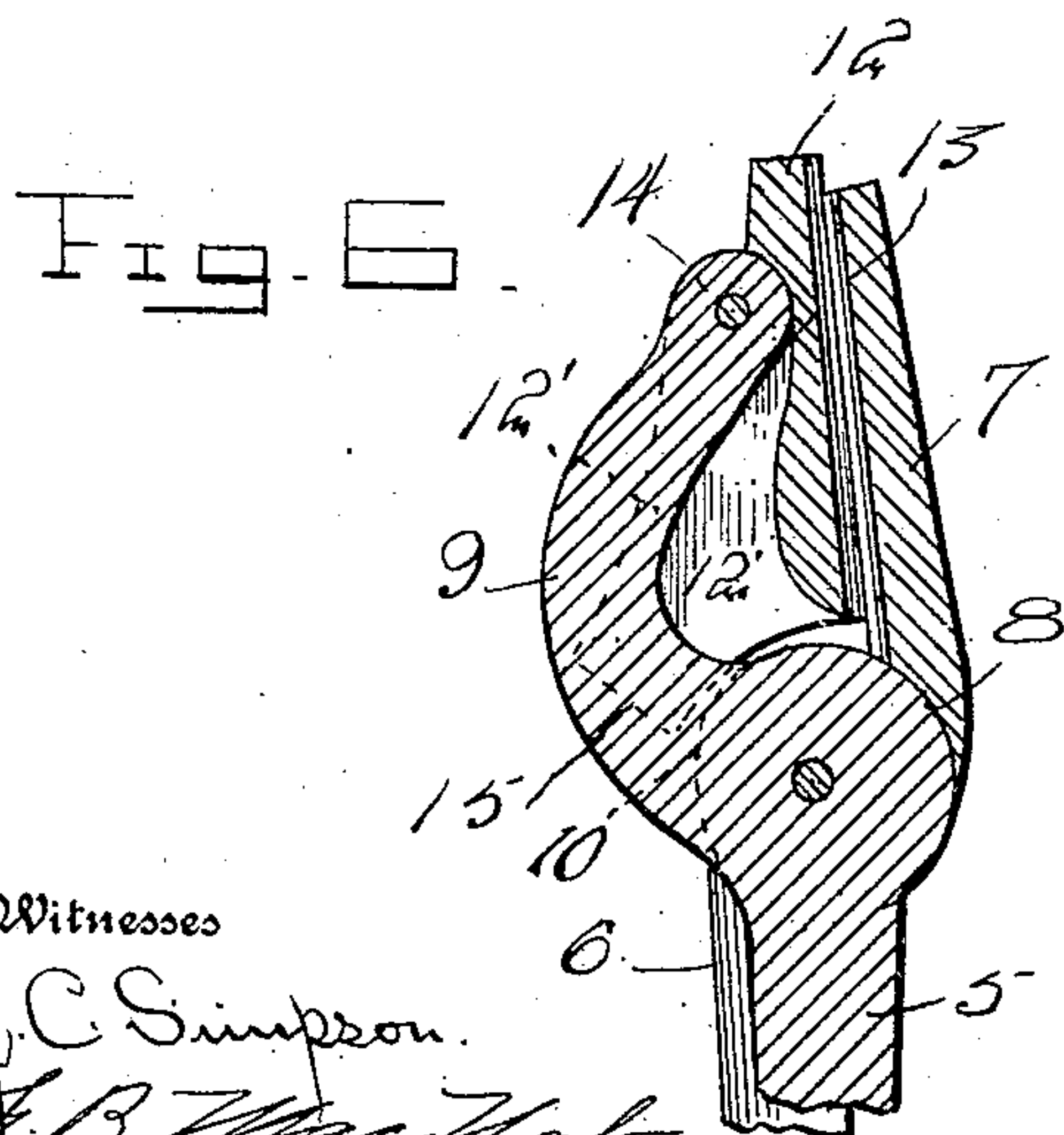


Fig. 5.



Witnesses

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# UNITED STATES PATENT OFFICE.

FRANK L. CASPER, OF WEINER, ARKANSAS.

## BLACKSMITH-TONGS.

No. 875,501.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed July 19, 1906. Serial No. 326,953.

*To all whom it may concern:*

Be it known that I, FRANK L. CASPER, a citizen of the United States, residing at Weiner, in the county of Poinsett, State of Arkansas, have invented certain new and useful Improvements in Blacksmith-Tongs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tongs and more particularly to those for use in farriery, and has for its object to provide a pair of tongs so constructed that its gripping lips will lie in parallel relation to present the maximum of gripping surface to the object to be held.

Another object is to provide a pair of tongs with which one lip will be removable to permit of substitution of lips of different forms therefor.

Other objects and advantages will be apparent from the following description, and it is to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the tongs. Fig. 2 is a front view, showing the ends of the lips. Fig. 3 is a detail sectional view through the finger and movable lip. Fig. 4 is an elevation through the finger and a modified form of the movable lip, having a longitudinal groove in its gripping surface. Fig. 5 is an elevation of a different form of tongs embodying the present invention. Fig. 6 is a longitudinal section.

Referring now to the drawings, the present invention comprises two handles 5 and 6 rounded at their forward ends, and these rounded portions are disposed against each other and are pivoted together, as shown. The handle 6 has a lip 7 extending forwardly from its rounded portion and laterally therebeyond, this jaw being cut away and recessed at its rearward portion, as shown at 8, to receive the rounded portion of the handle 5.

The rounded portion of the handle 5 has a finger 9 extending outwardly and forwardly therefrom at its opposite side from the lip 7, the free end of this finger being turned toward the lip, and this finger is offset later-

ally from the plane of the handle 5 adjacent to its inner end to form a shoulder 10 extending over the rounded portion of the handle 6, and forming also a shoulder 11 at the base of the finger. A lip 12 has parallel wings 12' which lie in spaced relation and in the lip between these wings a concavity 13 is formed, the curvature extending longitudinally of the lip. The finger 9 lies between the wings 12', with its forward rounded end in the concavity 13, a pivot pin 14 being passed through the wings and the lip at the forward portions thereof, the rearward portion of the lip 12 is thus movable toward and away from the lip 7, and laterally extending projections 15 are carried by the inner portions of the wings 12', one extending over the forward rounded portion of the handle 5, and the other over the corresponding portion of the handle 6, for engagement of these rounded portions to limit the pivotal movement of the lip 12 toward the lip 7.

It will be readily understood that when a body is grasped between the lips, the lip 12 will move upon its pivot to conform to the shape of the body and will present the greatest possible gripping surface thereto, and by reason of the fact that the forward end of the finger 9 extends into the concavity 13 and rests against the bottom thereof, the stress incident to operation of the tongs is removed from the pin 14. The rearward portion of the lip 12 between the wings 12' is rounded, to enter the concavity caused by the curvature of the finger 9, to permit of maximum movement of the lip 12 away from the lip 7.

In Fig. 4 there is shown a structure in which the lip 12 is provided with a longitudinal groove 17 in its inner surface, and in Fig. 5 the invention is shown embodied in a pair of tongs having rounded lips 18.

What is claimed is:

A pair of tongs comprising two handles provided adjacent their upper ends with enlarged rounded portions, a pivot pin projected centrally through said rounded portions, one of said handles having at its upper end a straight inclined inwardly pointing lip, the other handle having a curved inwardly pointing finger, a lip pivoted to the front end of said finger and comprising a working portion and spaced parallel outwardly extending wings overlying said finger on each side thereof, said wings being formed with rearward and outward projections having their

under sides concavely curved and formed to  
engage said rounded portions as stops, said  
projections being formed to project beyond  
said finger at one extreme of their pivotal  
5 movement and to overlie said finger within  
the confines thereof at the other extreme of  
their pivotal movement.

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

FRANK L. CASPER.

Witnesses:

JOHN WHITE,  
T. B. PROBST.