

(No Model.)

M. M. BILLMIRE.  
ROD OR BOLT WRENCH.

No. 586,004.

Patented July 6, 1897.

Fig. 1.

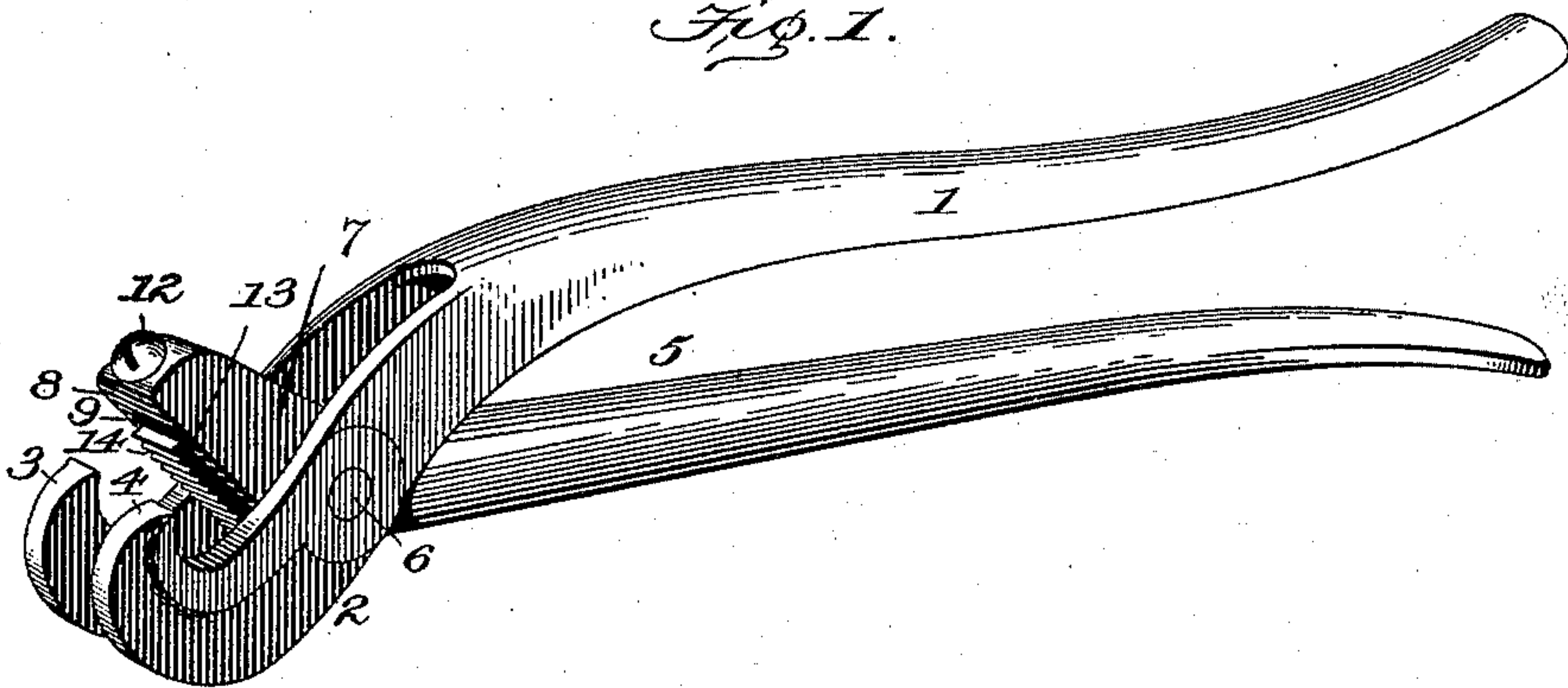


Fig. 2.

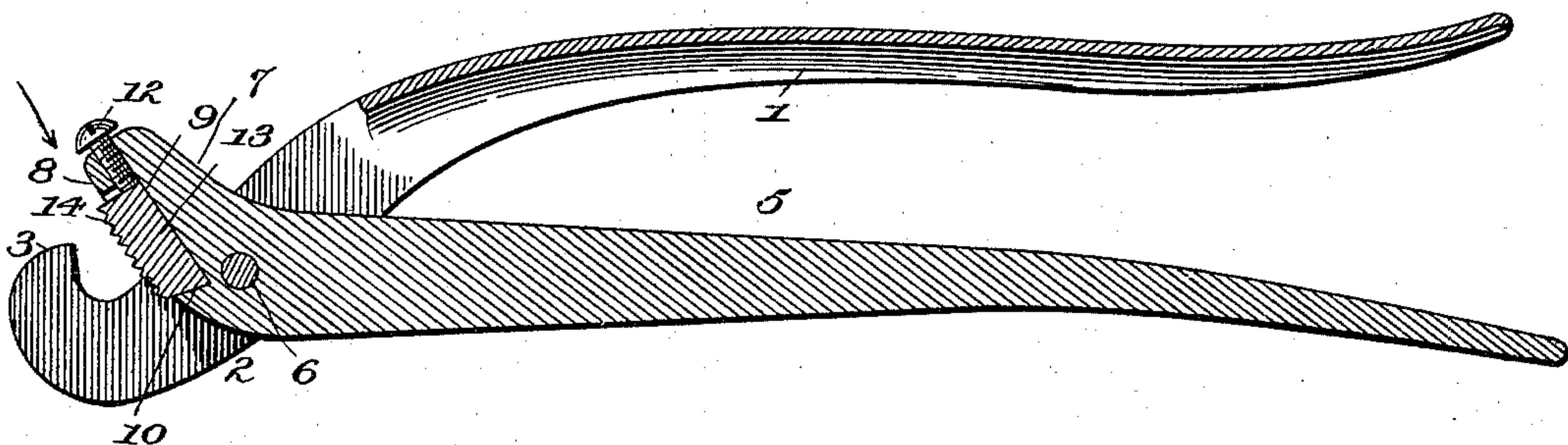


Fig. 3.

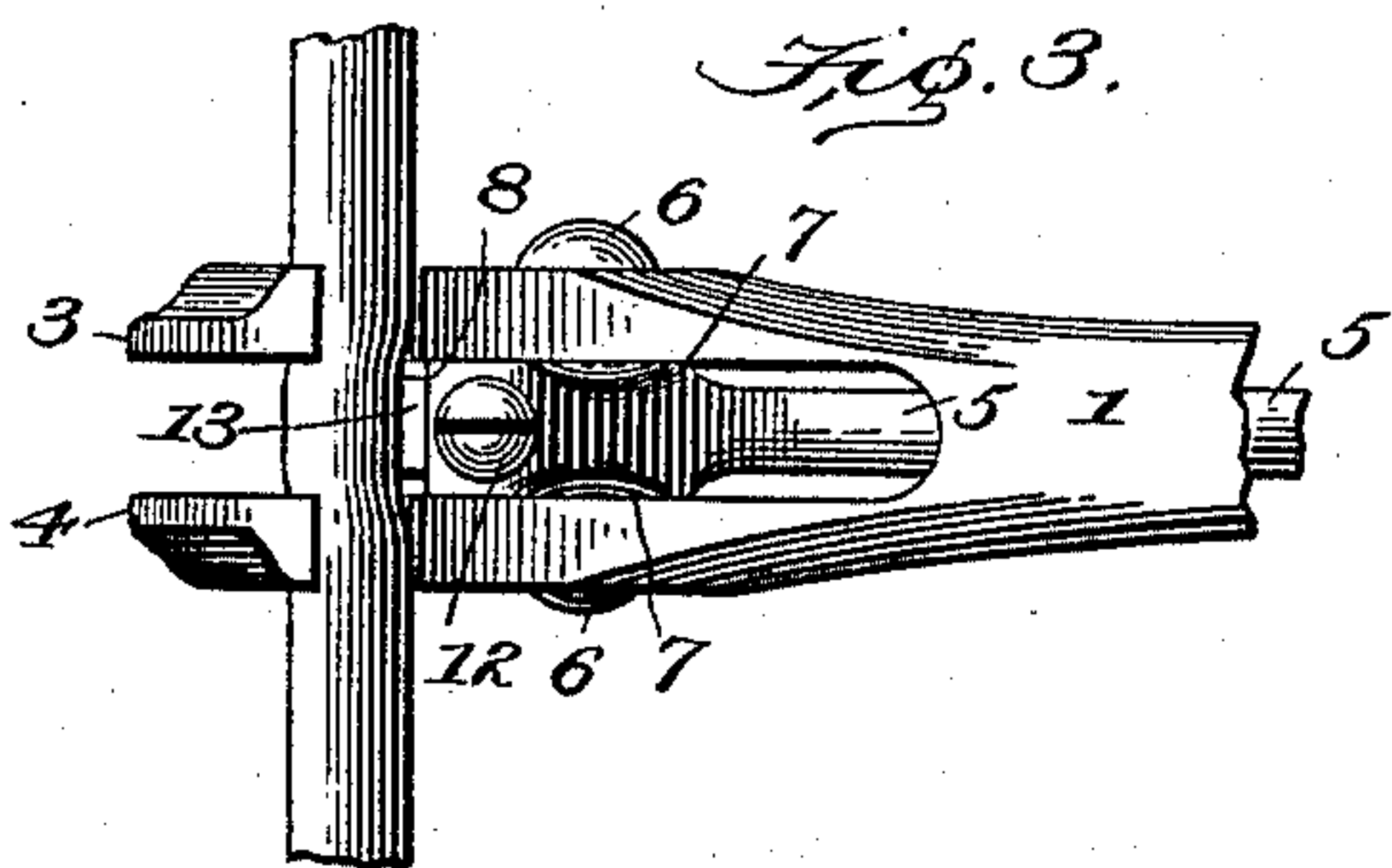
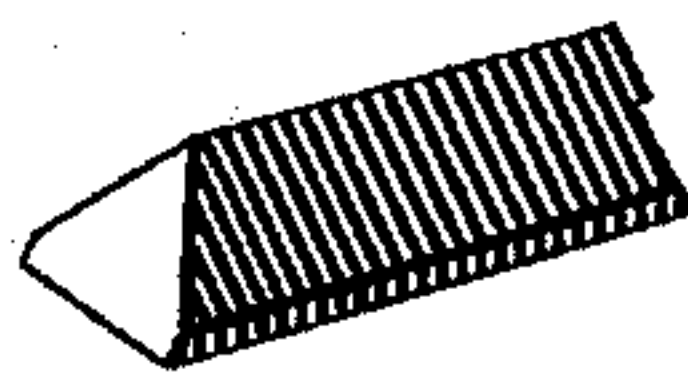


Fig. 4.



WITNESSES:

Edwin L. Bradford  
R. M. Pherson Jr.

INVENTOR

M. M. Billmire  
BY  
R. M. Pherson Jr.  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

MARTIN M. BILLMIRE, OF ASHTON, ILLINOIS.

## ROD OR BOLT WRENCH.

SPECIFICATION forming part of Letters Patent No. 586,004, dated July 6, 1897.

Application filed January 29, 1897. Serial No. 621,207. (No model.)

*To all whom it may concern:*

Be it known that I, MARTIN M. BILLMIRE, a citizen of the United States, residing at Ashton, in the county of Lee and State of Illinois, have invented certain new and useful Improvements in Rod or Bolt Wrenches; 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.

My invention has relation to rod and bolt tongs, and the object is to provide a simple and powerful tool for manipulating rods and bolts.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved rod and bolt tongs. Fig. 2 is a longitudinal section through the pivoted jaw. Fig. 3 is a view in the direction of the arrow in Fig. 2. Fig. 4 is a perspective view of the removable cutter-bit.

1 represents the handle, the head 2 of which is bifurcated to form the curved jaws 3 4.

5 represents a lever fulcrumed between said jaws on the rivet 6, so that its integral arm 7 extends across the gap between the curved jaws 3 4, and it will be seen that the arm 7 and the head 2 are at obtuse angles to their respective handles, as shown.

The face 8 of the arm 7 is formed with a rectangular recess 9, one end 10 of which is beveled inwardly, as shown, while the opposite end is provided with a set-screw 12.

13 represents a removable toothed bit having a series of transverse parallel teeth 14.

When a bar or rod is laid in the curved jaws 3 4 and the arm carrying the bit 13 brought in contact with it, sufficient power can be applied to the handle and lever by hand to force a portion of the body of the rod out of line and into the gap between the jaws and thus prevent the possibility of its turning.

By removing the toothed bit 13 and inserting the cutter-bit shown in Fig. 4 the tool is converted into a bolt or rod cutter.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

An improved rod and bolt wrench, comprising the handle 1, terminating in the upwardly-curved parallel jaws 3 and 4, forming the bifurcated head 2 arranged at an obtuse angle to said handle 1, in combination with the lever 5, fulcrumed on the bolt 6 between said parallel jaws 3 and 4 and having its arm 7 arranged at an obtuse angle to said lever and at an approximately right angle to said parallel jaws and having its plane face 8 formed with a rectangular recess 9 having an inwardly-beveled retaining end 10, a set-screw 12 adjustably secured in the outer end of said arm 7 and the removable bit 13, provided with a beveled end 10 and adapted to be secured in the recessed face of said arm 7 and travel to and from said jaws 3 and 4 substantially as shown and described.

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

MARTIN M. BILLMIRE.

Witnesses:

VICTOR H. MYERS,  
EDWARD B. ARNOLD.