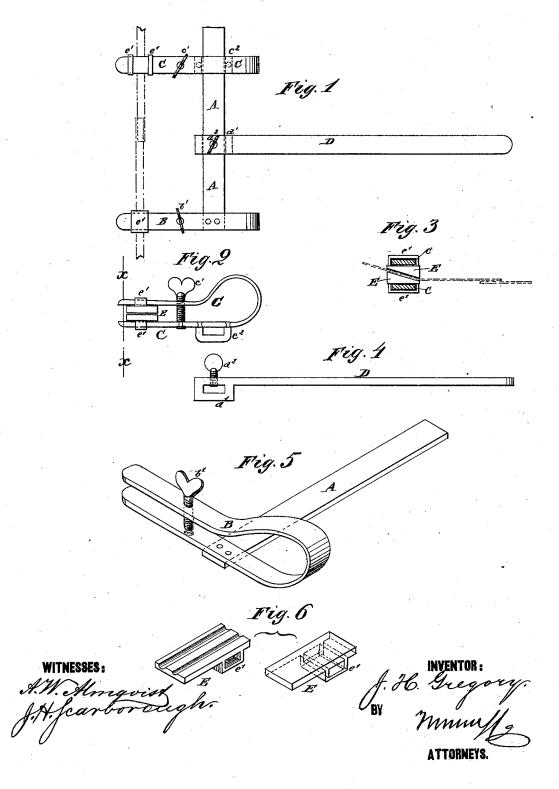
## J. H. GREGORY.

## BLACKSMITH'S TONGS.

No. 190,487.

Patented May 8, 1877.



## UNITED STATES PATENT OFFICE

JAMES H. GREGORY, OF COLUMBIA, TENNESSEE.

## IMPROVEMENT IN BLACKSMITHS' TONGS.

Specification forming part of Letters Patent No. 190,487, dated May 8, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, JAMES H. GREGORY. of Columbia, in the county of Maury and State of Tennessee, have invented a new and useful Improvement in Tongs, of which the following

is a specification:

Figure 1 is a plan view of my improved tongs. Fig. 2 is a detail side view of the detachable jaws. Fig. 3 is a detail cross-section of the same, taken through the line x x, Fig. Fig. 4 is a detail side view of the handle. Fig. 5 is a perspective view of the stationary jaws and the connecting-bar. Fig. 6 are detail perspective views of two different kinds of false jaws.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish tongs which shall be so constructed that they may be used for holding two pieces of iron together, either straight or at any desired angle, for welding; that they may be used as a clamp, for holding the two ends of a tire with any desired lap, or for holding a piece or splice to be inserted in a tire; that can be used for holding various kinds of blades and cutters to be ground, and for other similar

The invention consists in an improved tongs. formed by the combination of the bar, the stationary jaws, provided with a set-screw, the detachable jaws provided with a set-screw, and a keeper, and the handle, provided with a keeper and a set-screw, with each other; and in the combination of the false jaws, provided with the keepers, with the jaws of the tongs, as hereinafter fully described.

A represents a bar, of any convenient length, to one end of which is riveted the lower one of the jaws B. The jaws B are made of a bar of elastic metal, bent into U shape, and held together by a hand-screw, b', passing through one of said jaws and swiveled to the other.

C are jaws exactly like the jaws B, and held

together by a swiveled hand-screw, c1, in the

same way.

Upon the outer side of the upper jaw, C, is formed, or to it is attached, a keeper, c2, to receive the bar A, so that it may be readily slipped on or off the said bar A, and adjusted at any desired distance from the stationary jaws B.

D is a handle, which may be of any convenient length, and to the side of the forward end of which is attached a keeper,  $d^1$ , to receive the cross-bar A. The handle D may be placed upon either side of the movable jaws BC, as may be desired, or as the character of the work may require, and is secured in place,

when adjusted, by a set-screw,  $d^2$ .

False jaws of any desired form may be used upon the jaws B C, to prevent them from becoming unduly heated, and which are provided with keepers e', to receive the said jaws B C, and keep the said false jaws in place.

A third set of jaws may be placed upon the cross-bar, to enable long pieces of iron to be more readily balanced, and to insure accuracy of position.

Having thus described my invention, I claim as new and desire to secure by Letters

1. An improved tongs, formed by the combination of the bar A, the stationary jaw B, provided with the set-screw b', the detachable jaw C, provided with the set-screw c1 and the keeper c2, and the handle D, provided with the keeper  $d^1$  and the set-screw  $d^2$  with each other, substantially as herein shown and described.

2. The combination of the false jaws E, provided with the keepers e', with the jaws B C of the tongs ABCD, substantially as herein

shown and described.

JAMES H. GREGORY.

Witnesses:

C. W. WITHERSPOON, W. O. WITHERSPOON.