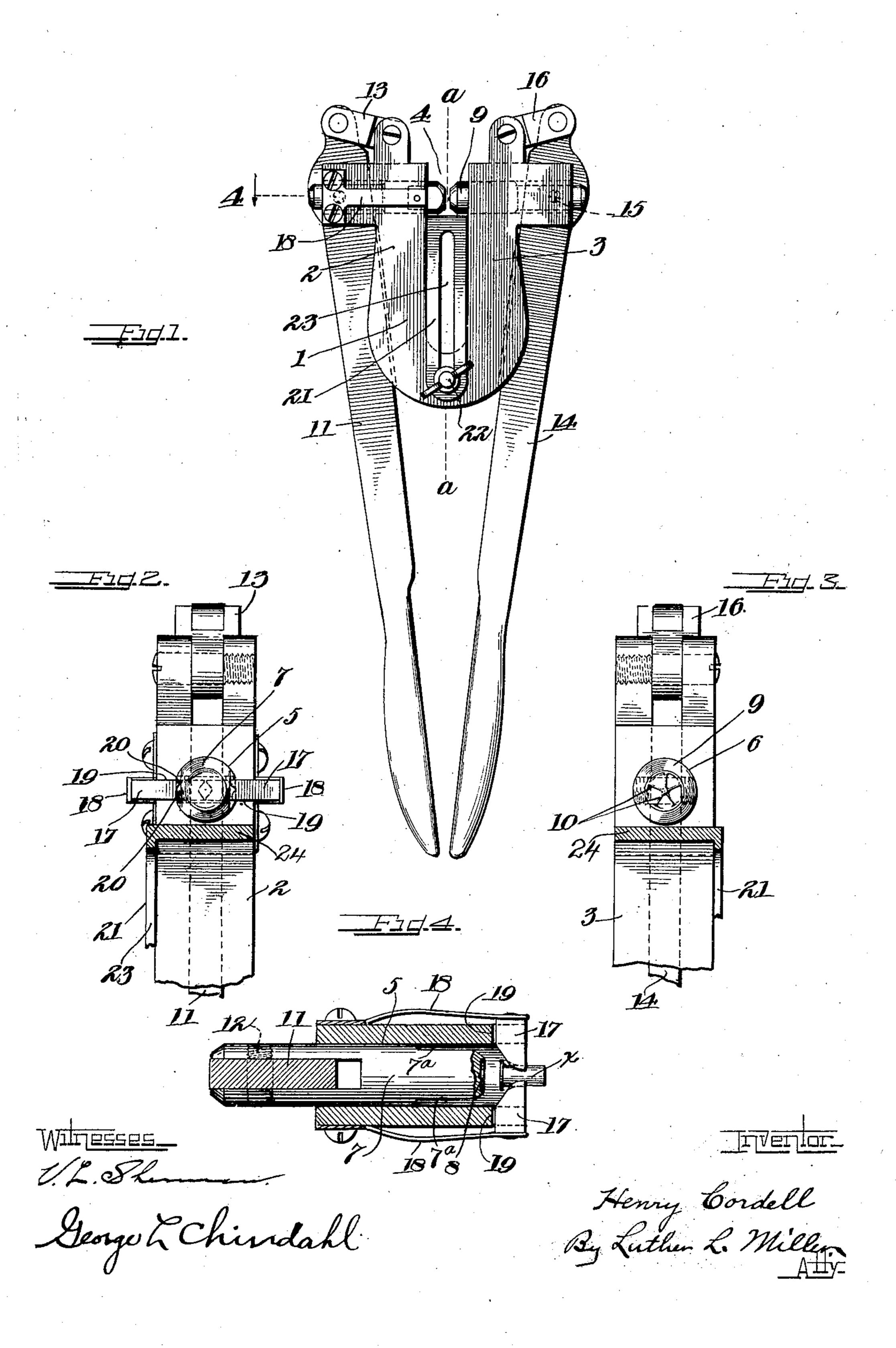
H. CORDELL.

RIVETER.

APPLICATION FILED SEPT. 10, 1906.



## UNITED STATES PATENT OFFICE.

HENRY CORDELL, OF CHICAGO, ILLINOIS.

## RIVETER.

No. 890,965.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed September 10, 1906. Serial No. 333,922.

To all whom it may concern:

Be it known that I, Henry Cordell, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Riveters, of which the following is a specification.

One of the objects of this invention is the production of an improved hand implement

10 for inserting and upsetting rivets.

Another object of the invention is the provision, in a riveter, of means for holding the rivet in place while the riveter is being placed in operative relation to the parts to be fastened together.

The invention also relates to the other improvements in riveters hereinafter set forth.

In the accompanying drawings, Figure 1 is a side view of a riveter embodying the features of my invention. Fig. 2 is a sectional view taken on the plane of dotted line a a in Fig. 1, looking toward the left. Fig. 3 is a sectional view taken on the same plane, but looking in the opposite direction. Fig. 4 is a sectional view through one side of the tool,

on dotted line 4 in Fig. 1.

The body portion 1 of the implement is Ushape in form and comprises two arms 2 and 3 providing between them a throatway 4, for 30 the reception of the rivet and the parts to be secured together. Alined openings 5 and 6 extend transversely through the arms 2 and 3, respectively. In the openings 5 is slidably mounted a die 7 having a slightly dished 35 face 8. In the opening 6 is slidably mounted a die 9 the working face of which is provided with a plurality of radial ribs 10 adapted to split the tubular rivet for which this implement is especially designed, and spread the 40 sides of said rivet outwardly in the wellknown manner. The die 7 is reciprocated by means of a lever 11 connected with said die by means of a pivot pin or screw 12, said lever being connected with the forward end 45 of the arm 2 of the body portion 1 by a link 13 pivotally connected with said lever and said arm. The die 9 is reciprocated by means of a lever 14 pivoted at 15 to said die and having a link (16) connection with the 50 forward end of the arm 3 of the body portion 1.

The means for holding the rivet in place consists of two jaws 17, each fixed to the leaf spring 18 fixed to one side of the arm 2 of the body portion 1, recesses 19 being provided in said arm to receive said jaws. The engag-

ing ends of the jaws 17 are suitably shaped so as to securely hold the rivet, as by forming teeth 20 on said jaws. The rear sides of said jaws are made wedging to permit the die 7 60 readily to enter between and spread said jaws, said die, in this instance, being cut away or flattened on opposite sides at 7<sup>a</sup> to decrease the distance which the gripper jaws 17 must be moved outwardly when the die 7 moves 65 into working position.

A gage 21 may be provided, if desired, said gage being adjustably secured to the body portion 1 by means of a thumb screw 22 passing through an elongated opening 23 in 70 said gage into said body portion. The gage 21 has a portion 24 extending at a right angle to the body of said gage, said angular portion being adapted to lie between the arms 2 and 3 to determine the proper position of the 75

parts to be operated upon.

In its present embodiment this invention is particularly adapted for use in riveting articles in place, that is to say, the rivet may be secured in the tool and the tool brought to 80 and placed upon the work, obviating the necessity of bringing the latter to the tool,

In use, a tubular rivet x is placed with its closed end seated upon the dished face 8 of the die 7 and said die moved outwardly by 85 means of the lever 11, said outward movement permitting the gripper jaws 17 to approach each other to grasp said rivet between them (Fig. 4.) The implement is then placed in position upon the parts to be riv- 90 eted together, as, for instance, the two ends of a car strap looped over its supporting rod in a street railway car. The levers 11 and 14 are then operated to bring the dies 7 and 9 together, the die 7 in its inward movement 25 spreads the gripper jaws 17 so as to release the rivet x, and said rivet is forced by the dies 7 and 9 through the strap and clenched.

I claim as my invention:

1. A hand-held riveting implement comprising a body portion, a die slidably mounted in said body portion, an operating lever connected at one end with the body portion and connected between its ends with the die, a second die, and a member connected with 105 said body portion and serving as the other handle.

2. In a hand riveter, in combination, a body portion comprising two arms providing a throatway between them, said arms having 110 alined openings formed therein; two dies slidably mounted in said openings; operating

levers pivoted to said dies and having link connection with the forward ends of said arms, said levers serving as handles for the implement; two leaf springs secured to opposite sides of one of said arms; a gripper jaw secured to the outer end of each of said leaf springs and carried by said springs, said arm

being recessed to receive said jaws, the rear sides of said jaws being made wedging for engagement by the adjacent die.

HENRY CORDELL.

Witnesses:
L. L. Miller,
George L. Chindahl.