No. 622,204. Patented Apr. 4, 1899.

G. W. & H. BUMBAUGH.

RIVETING TOOL.

(Application filed Mar. 29, 1898.)

(No Model.)

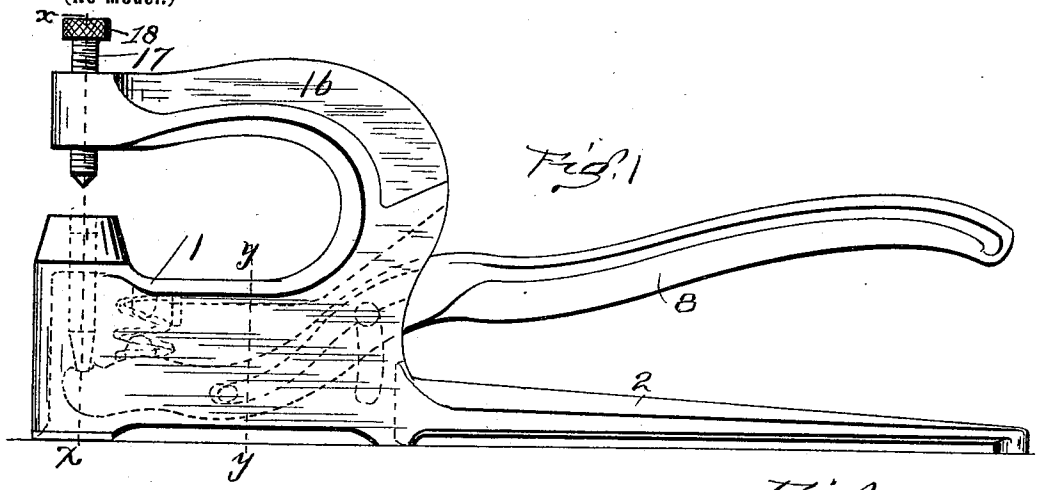


Fig. 1

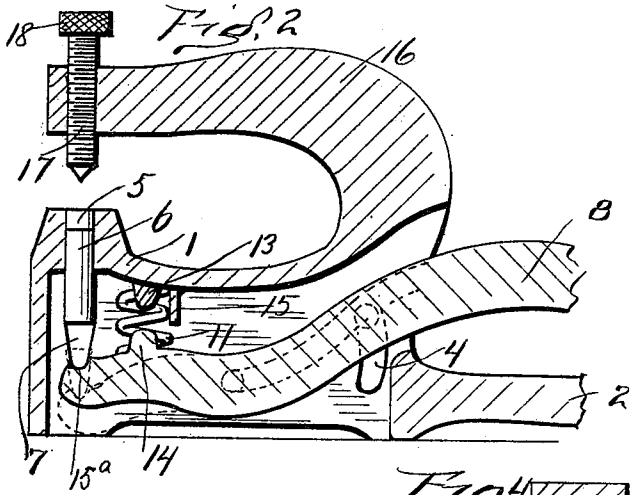


Fig. 2

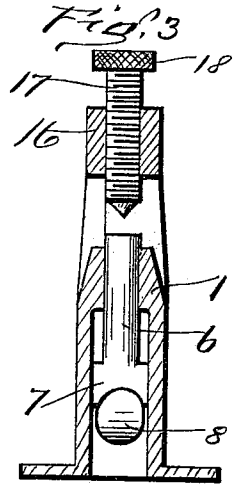


Fig. 3

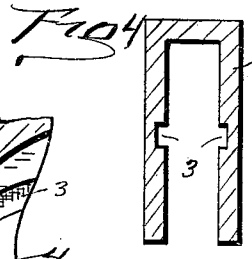


Fig. 4

Fig. 6

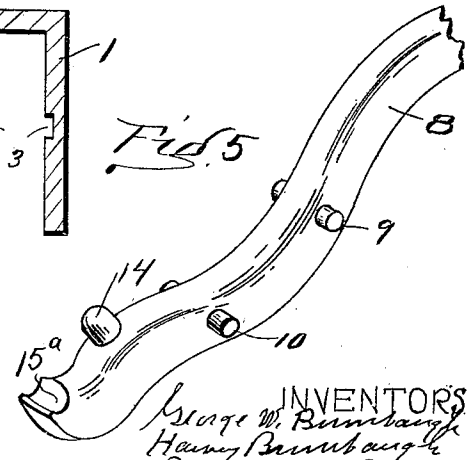


Fig. 5

WITNESSES

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UNITED STATES PATENT OFFICE.

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RIVETING-TOOL.

SPECIFICATION forming part of Letters Patent No. 622,204, dated April 4, 1899.

Application filed March 29, 1898. Serial No. 675,643. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. BUMBAUGH and HARVEY BUMBAUGH, citizens of the United States, residing at Salem, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Riveting-Tools; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a side elevation. Fig. 2 is a longitudinal vertical section showing portions of the handles. Fig. 3 is a transverse section through line *x x*, Fig. 1. Fig. 4 is a transverse section through line *y y*, Fig. 1, except the lever is shown removed. Fig. 5 is a detached view showing portion of the lever. Fig. 6 is a vertical section of the housing, showing the lever removed.

The present invention has relation to riveting-tools; and it consists in the different parts and combination of parts hereinafter described.

Similar numbers of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the head or housing, which is provided with the integral handle or bar 2, said bar being extended so as to provide a handle. The head or housing 1 is formed hollow and the vertical sides thereof are each provided with the grooves 3 and 4, said grooves being located substantially as shown in Fig. 5. The upper and forward portion of the housing 1 is provided with the aperture 5, which aperture forms a guide for the plunger 6. The plunger 6 is extended downward and into the housing and its bottom or lower end provided with the V or U shaped portion 7.

The lever or handle 8 is provided with the pins or lugs 9, said pins or lugs being located and arranged substantially as shown in the drawings and are for the purpose hereinafter described. The grooves 3 are open at their rear ends and closed at their forward ends and are so formed for the purpose of allowing the lever or handle 8 to be placed in the position illustrated in Fig. 1. The pins 10 are placed in the open ends of the grooves 3, after which the lever and pins are carried forward until the pins 10 engage the lower ends of the grooves 3, at which time the pins 9 are brought directly over the top or upper ends of the grooves 4, which grooves enter or lead into the grooves 3, as illustrated in Fig. 6, thereby allowing the lever to be moved downward at its rear end. The grooves 4 are for the purpose of guiding the lever or handle 8, or, in other words, preventing any longitudinal movement of said handle during the time it is pressed or forced downward to elevate the plunger 6. The pins 10 are for the purpose of providing a fulcrum for the lever or handle 8.

In use the lever or handle 8 when in its normal position is elevated at its rear end and lowered at its forward end, by which arrangement the plunger 6 is lowered so that its top or upper end will come a short distance below the top of the aperture, and into which aperture and on top of the plunger can be placed a rivet.

For the purpose of holding the lever or handle 8 in the position illustrated in Figs. 1 and 2 the spring 11 is provided, which spring forces the forward portion of the lever or handle downward. For the purpose of holding the spring 11 in proper position the lugs 13 and 14 are provided, the lug 13 being formed upon the inside of the upper part of the housing and the lug 14 formed upon the top side of the lever or handle 8.

If desired, a flange, such as 15, may be formed upon the housing 1, which is for the purpose of assisting in holding the spring.

It will be understood that by our peculiar construction no rivets are required or used in connecting the handle or lever to the housing, by which construction the expense of manufacture is reduced, and at the same time the handle or lever 8 can be easily removed for any desired purpose.

For the purpose of providing a proper connection between the plunger and the handle or lever 8 said lever is provided at its forward end with the notch or recess 15^a, which recess receives the bottom or lower end of the plunger, as illustrated in the drawings. For the purpose of compensating for the arc described by the forward end of the handle or lever 8 the recess 15^a should be so formed

that the plunger will not bind during the time it is elevated, as it will be understood that the plunger must move in a straight line.

The housing 1 is provided with the arm 16, which is bent or curved up and forward substantially as illustrated in the drawings, and, as shown, it is provided with the adjustable die 17, said die being provided with a screw-threaded portion and located through a screw-threaded aperture formed in the forward end of the arm 16. For the purpose of providing suitable means for rotating the die its top or upper end is provided with the knob 18, which may be of any desired form.

In use it will be understood that a rivet is to be placed on the top of the plunger and the material to be riveted placed between the rivet and die, after which the lever 8 is forced down.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a riveting-tool, the combination of a housing provided with an integral handle or bar, grooves located in the vertical sides of the housing or head, a lever or handle provided with pins and the pins located in the grooves, a notch or recess formed in the forward end of the lever, a plunger resting on or connecting with the lever at its lower end, and an adjustable die located above the plunger, substantially as and for the purpose specified.

2. The combination of the housing 1 provided with a fixed handle or bar, grooves formed in the vertical sides or portions of the housing and located at an angle one to the other, a handle or lever provided with pins located in the grooves, a plunger resting on or connecting with the handle and a die located above the plunger, substantially as set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

GEORGE W. BUMBAUGH.
HARVEY BUMBAUGH.

Witnesses:
GEO. W. HACK,
JOHN W. SLAYTON.