No. 676,827. Patented June 18, 1901.

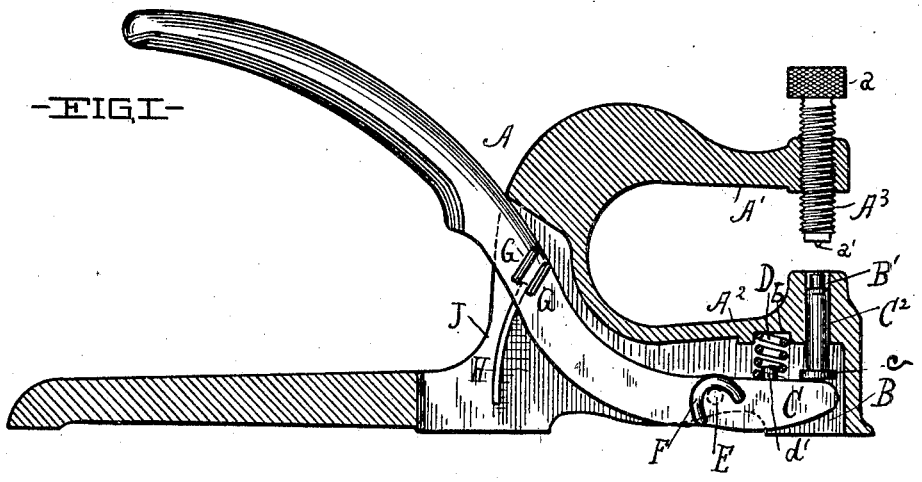
A. C. WILLIAMS.

RIVETING MACHINE.

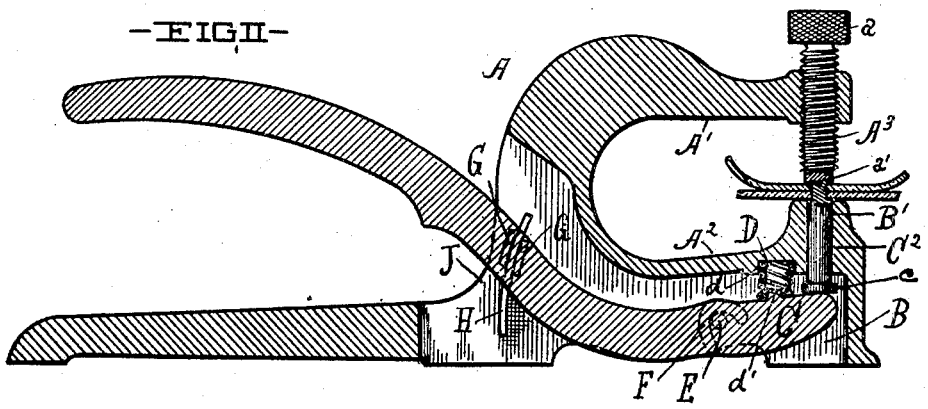
(Application filed Mar. 1, 1899.)

(No Model.)

-FIG. I-



-FIG. II-



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UNITED STATES PATENT OFFICE.

ADAM C. WILLIAMS, OF RAVENNA, OHIO.

RIVETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 676,827, dated June 18, 1901.

Application filed March 1, 1899. Serial No. 707,277. (No model.)

To all whom it may concern:

Be it known that I, ADAM C. WILLIAMS, a resident of Ravenna, Portage county, and State of Ohio, have invented certain new and useful Improvements in Riveting-Machines; 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 pertains to make and use the same.

My invention relates to riveting-machines such as are used for riveting or securing together layers of leather, rubber, or the like.

My invention consists in the peculiar construction of the machine whereby the parts thereof are easily and economically constructed and whereby the parts may be easily and economically assembled, all of which will be hereinafter fully set forth and claimed.

In the drawings, Figure I is a sectional view taken longitudinally and vertically through the body of the machine, illustrating the interior construction of the machine and the relation of its operative parts. In this view the movable plunger is illustrated in such position as it assumes before the machine is applied to perform its function. Fig. II is a like sectional view illustrating the parts of the machine in the position which they assume during the operation of riveting. Fig. III is a view in rear elevation of the body, showing the opening in the rear of the frame adapted to receive the plunger-lever in assembling the parts.

In the drawings, A represents the frame of the machine, provided with upper jaw A′ and lower jaw A^2. The upper jaw A′ is provided at its outer or forward end with an adjustable anvil, which is constructed in the form of a screw A^3 and is provided at its upper end with a mill-head *a* for operating it. The anvil portion of the screw A^3 is pointed, as at *a*′, and is also recessed in the usual manner, so as to properly enter and spread the rivet. This lower jaw A^2 of the machine is formed with a recess B for the purpose of receiving and containing the forward end of a plunger-lever C and is also provided with an orifice B′ at its upper forward end of sufficient bore to receive the rivet and at the same time receive, guide, and allow of the free vertical movement of a plunger C^2, which is located directly beneath the anvil-screw A^3. The plunger C^2 is preferably headed or provided with a flange *c* to prevent the same from dropping from the machine and provide a proper abutting surface for the forward end of the plunger-lever C.

D represents a spiral spring, which is located to the rear of the plunger C^2 and between the forward end of the plunger-lever C and the upper wall of the lower jaw B. The spring D is held in position by having its upper end inserted in a recess *b*, formed in said upper wall. At the lower end the spring D surrounds a stud *d*′, formed upon the upper face of the plunger-lever C.

E E represent pivotal studs cast or formed in the side walls of the recess B. The studs E E act as the fulcrum for the plunger-lever C and are engaged by flanged pockets F F, located, respectively, at either side of said plunger-lever. The formation of the flanged pockets F is such that while they form a bearing or fulcrum portion for the plunger-lever C they are opened at their lower portions.

G G represent guide-lugs, secured, respectively, upon the opposite sides of the plunger-lever C. The ribs G G are suitably placed so as to receive and be guided by curved ribs H H, located upon the respective sides of the recess B. The function of the ribs G G of the plunger-lever C and the curved engaging ribs H H is to retain the plunger-lever C in proper position in the recess B and at the same time allow of the proper sweep of said lever during the operation of riveting.

J represents the rear opening of the recess B, which is formed large enough to admit of the insertion of the plunger-lever C and allow said lever to be so manipulated as to assemble the parts into the position illustrated in Figs. I and II of the drawings.

By a construction made according to my invention the upper jaw A′ and lower jaw A^2 and the plunger-lever C may be finished in the casting, and it will not be necessary to "fit" the aforesaid parts for the purpose of assembling the same except to cast these parts.

What I claim is—

In a riveting-tool, the combination of a hous-

ing provided with an integral handle, curved ribs H, H, located in the interior of said housing and formed integral therewith, lugs E, E, projecting inwardly from the sides of said housing and formed integral therewith, a lever adapted to fit into said housing, said lever being provided on each side with guide-ribs adapted to embrace the ribs H, H, respectively, and curved bearing-ribs adapted to rest on the lugs E, E, respectively, a plunger resting on the inner end of said lever and an anvil located above said plunger, substantially as described and for the purpose set forth.

Signed by me at Ravenna, Ohio, this 15th day of February, 1899.

ADAM C. WILLIAMS.

Witnesses:
C. W. GOODSELL,
S. T. HANSELMAN.