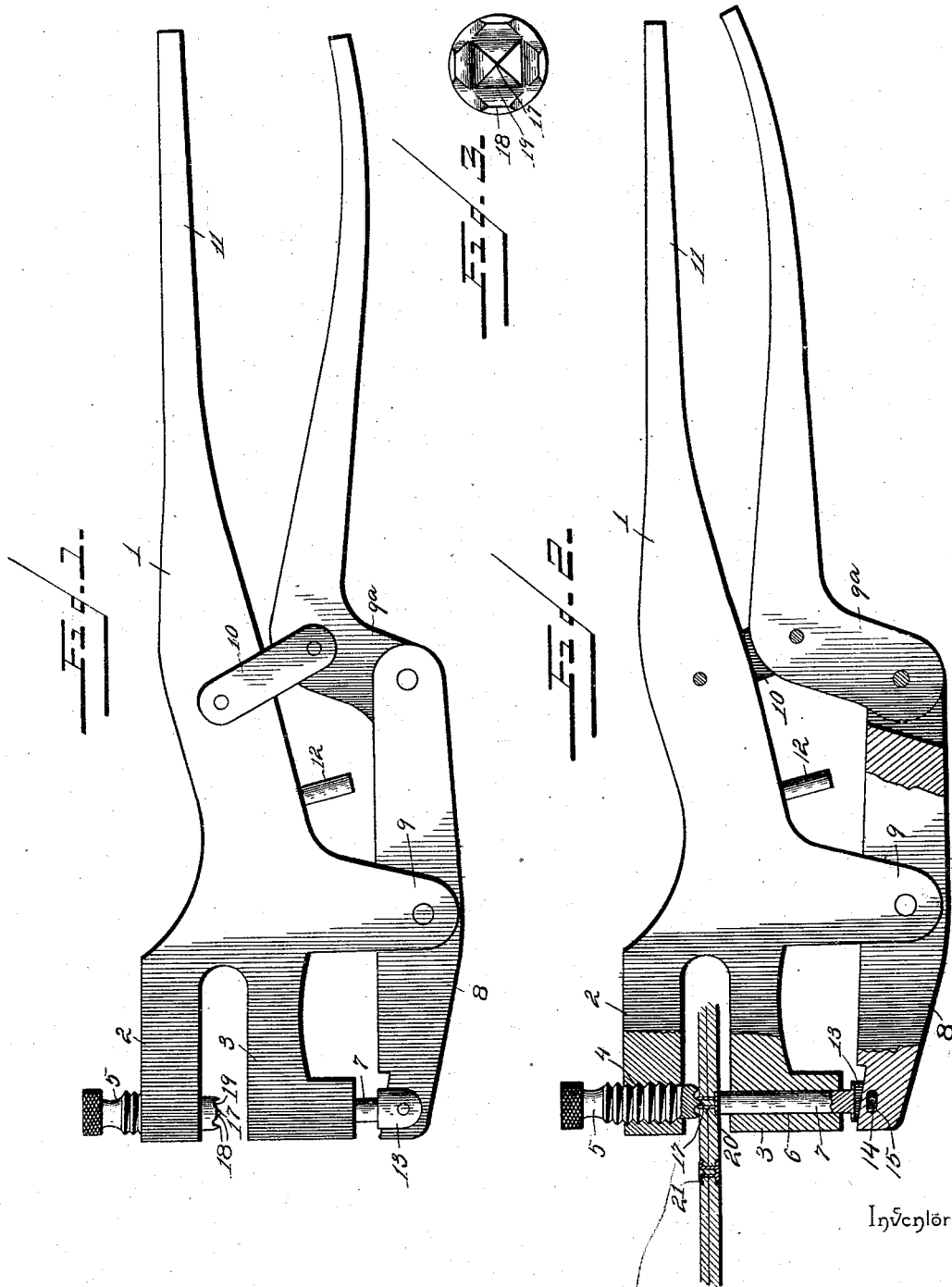


(No Model.)

F. A. JABERG.
RIVETING MACHINE.

No. 553,284.

Patented Jan. 21, 1896.



Witnesses

T. W. Riley.

[Signature]

By His Attorneys.

Frank A. Jaberg.

Chas. H. Snow & Co.

UNITED STATES PATENT OFFICE.

FRANK A. JABERG, OF NEW PHILADELPHIA, OHIO, ASSIGNOR OF ONE-HALF
TO JOHN GILGEN, OF SAME PLACE.

RIVETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 553,284, dated January 21, 1896.

Application filed March 28, 1895. Serial No. 543,572. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. JABERG, a citizen of the United States, residing at New Philadelphia, in the county of Tuscarawas and State of Ohio, have invented a new and useful Riveting-Machine, of which the following is a specification.

My invention relates to riveting-machines adapted for applying hollow rivets, and the object in view is to provide a simple, strong, and efficient construction having means of adjustment to suit different thicknesses of objects to be connected by rivets, whereby said objects may be held firmly in place during the punching thereof and the application of the rivet thereto.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a side view of a riveting-machine constructed in accordance with my invention. Fig. 2 is a partial side view, in section, to show the relative arrangement of the plunger and the adjustable die. Fig. 3 is a detail plan view of the face of the adjustable die.

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

1 designates the main stock or frame of the device, which is provided at its front end with approximately parallel jaws 2 and 3, the former of which is provided with a threaded opening 4 for the reception of the threaded body portion of the adjustable die 5, and the latter of which is provided with a smooth guide-opening 6 in axial alignment with the opening 4. In this guide-opening 6 is fitted the plunger 7, which is pivotally connected at one end to a rocking lever 8, said lever being fulcrumed at an intermediate point between parallel ears 9 integral with the stock or frame. Motion is imparted to this rocking lever to actuate the plunger by means of an angular operating-lever 9^a, connected at a point near its angle with the main stock or frame by means of swinging links 10 and pivotally connected at its extremity to the rear end of the

rocking lever, which is bifurcated for its reception. This operating-lever extends rearwardly, and is adapted to be grasped by the hand holding the shank or handle 11, which is integral with the stock or frame, and a stop-pin 12 is fixed upon the stock or frame contiguous to the rear end of the rocking lever to limit its movement toward the stock.

The connection between the plunger and the front end of the rocking lever is by means of a bifurcated extremity 13 of the plunger embracing the end of the lever, and a transverse pin 14 connecting the arms of the bifurcation and extending through a longitudinal slot 15 in the lever, whereby the plunger is guided solely by the opening in which it is fitted and is not drawn out of alignment therewith by its connection with the rocking lever.

The adjustable die which fits in the threaded opening in the jaw 2 of the stock or frame is provided at its outer end with a milled head 16 to facilitate adjustment, and the face of this die is of such construction as to spread the end of a hollow rivet and cause the split extremity thereof to turn back upon and enter the surface of the object through which the rivet has been passed. This die-face, therefore, is projected at its center to form a pyramidal boss 17 and near its periphery to form spurs 18, concave turning guides 19 being arranged between the apex of the pyramidal boss and said spurs. The apex of the boss enters the open end of a hollow rivet, such as that shown in section at 20 in Fig. 2, and when pressure is exerted upon the opposite end of the rivet said open end is split by the several angles of the boss, and the ends thus formed are flared and turned back upon the object, such as that shown at 21, to enter the surface thereof and thus conceal or countersink the edges.

The rivet is first placed in the guide-opening for the plunger, after which the object through which the rivet is to be passed is arranged between the jaws at the proper point, and the adjustable die is turned to bear upon the object and thus clamp it between the die-face and the surface of the jaw 3. In this way the object is held firmly in place during the operation of the machine and forces the rivet

through the object and flares its free end, as above described. Thus the guide 6 serves as a receptacle and guide for the rivet or eyelet to insure its approach to and penetration of the article in the proper direction, and inas-
5 much as the article through which the rivet or eyelet is to be passed is held firmly clamped in place between the jaws by means of the adjustable die the disarrangement of the
10 parts during the penetration thereof by the rivet or eyelet is prevented.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit
15 or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. In a machine of the class described, the
20 combination of a stock or frame having fixed spaced jaws provided with axially aligned guide-openings formed perpendicular to the faces of the jaws, an axially adjustable die fitted in one of the guide-openings and ad-
25 justable toward the face of the other jaw to clamp an article between its extremity and said jaw, a plunger fitted in the other guide-opening and adapted to recede at its extremity beyond the face of the jaw in which it is
30 mounted, to provide for the introduction of a rivet or eyelet into its guide-opening before the article is clamped by said die, and means

for operating the plunger, substantially as specified.

2. In a machine of the class described, the
35 combination of a stock or frame provided with fixed integral spaced jaws having axially aligned guide-openings arranged perpendicular to the face of the lower jaw, a die threaded in the guide-opening of the upper jaw and
40 adapted to be adjusted toward and from the plane of the face of the lower jaw, to clamp an article between its extremity and said lower jaw, a plunger fitted to slide in the
45 guide-opening of the lower jaw and adapted to recede at its upper extremity below the plane of the face of the lower jaw, whereby a rivet or eyelet may be arranged in said guide-
50 opening to rest upon the upper extremity of the plunger before the article is clamped between the extremity of the die and the face of the lower jaw, said die having its lower ex-
55 tremity constructed to spread or swage the upper end of a rivet or eyelet coming in contact therewith, and means for operating the plunger, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK A. JABERG.

Witnesses:

JAS. STEPHENSON,
LOUIS WELTY.