

(No Model.)

L. L. ROWE.
CRIMPING TOOL.

No. 354,657.

Patented Dec. 21, 1886.

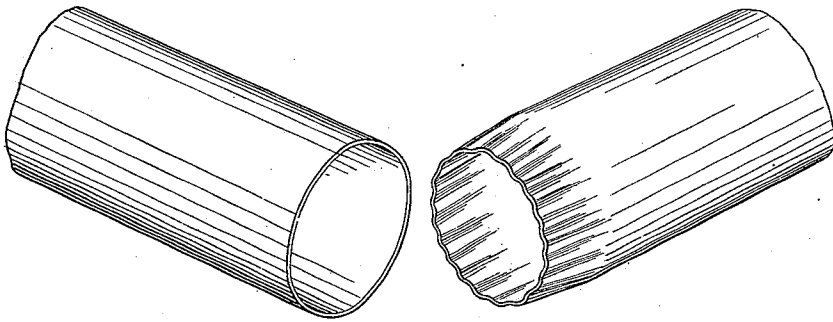


FIG. 1.

FIG. 2.

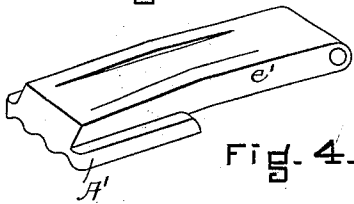


FIG. 4.

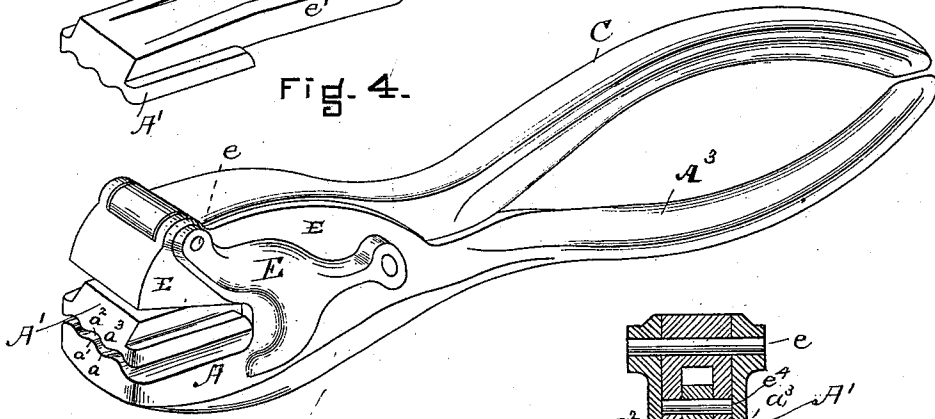


FIG. 5.

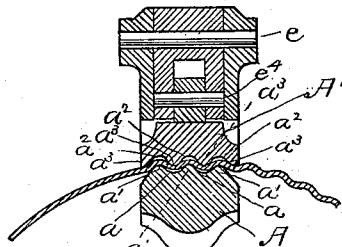


FIG. 6.

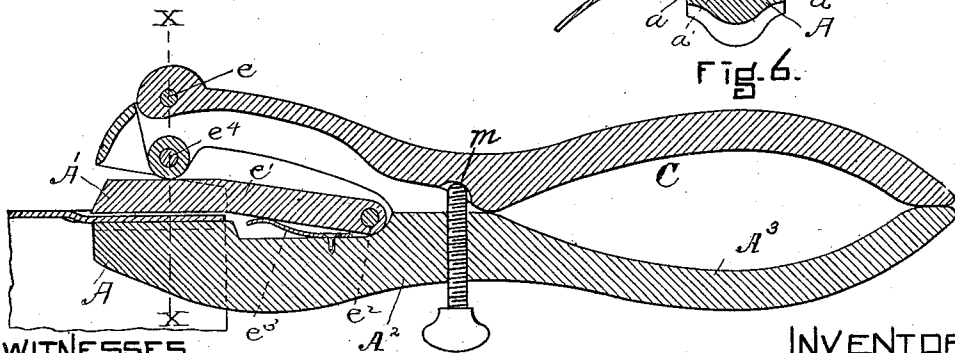


FIG. 5.

WITNESSES.
Fred. B. Dolan.
J. M. Dolan.

INVENTOR-
L. Leroy Rowe
by his attys
Charles & Raymond.

UNITED STATES PATENT OFFICE.

L. LEROY ROWE, OF BOSTON, MASSACHUSETTS.

CRIMPING-TOOL.

SPECIFICATION forming part of Letters Patent No. 354,657, dated December 21, 1886.

Application filed June 28, 1886. Serial No. 206,453. (No model.)

To all whom it may concern:

Be it known that I, L. LEROY ROWE, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Devices for Crimping the Ends of Stove or other Sheet-Metal Pipe, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

It is very desirable to provide means whereby stove and other sheet-metal pipe of a uniform diameter throughout can be quickly and easily united. Heretofore this has often been done by slitting the end of one pipe so that it may be bent inward somewhat and overlap and thereby form an end section of less diameter, which will enter the end of another section of pipe of the same diameter. This method of reducing the diameter of a pipe is objectionable because it is necessary to cut the pipe, and because, so far as I am aware, there are no means by which it can be done expeditiously. Another way of reducing the diameter of the pipe is to form corrugations therein which extend from the end backward, gradually decreasing in depth. This provides the end of the pipe with a gradual and regular taper. In order to accomplish this result, however, it is desirable to employ a tool having two jaws, each of which is provided with parallel projections and recesses, the projections of each jaw being arranged to enter the recesses of the other. It is also necessary that these jaws be supported in a manner to permit one to be moved in relation to the other with a very considerable force or pressure, and my invention relates to a device or tool of this character.

Referring to the drawings, Figure 1 is a view in perspective of a section of a sheet-metal pipe of the same diameter throughout. Fig. 2 is a perspective view of the entire section of pipe, showing its end reduced in size or taper by corrugations formed therein. Fig. 3 is a view in perspective of the complete crimping-tool. Fig. 4 is a view in perspective of a movable jaw forming a part thereof. Fig. 5 is a vertical central section thereof. Fig. 6 is a cross section upon the line xx of Fig. 5.

A represents one jaw of the tool or device, and A' the other.

The jaw A has the recesses a and projections a' , and the jaw A' has the recesses a^2 and projections a^3 , so arranged in relation to the recesses and projections of the jaw A that the projections a' of the said jaw A enter the recesses a^2 of the jaw A', while the projections a^3 of the jaw A' shut or close into the recesses a of the jaw A.

The jaw A' is formed at the end of a short arm, e' , which is pivoted at e^2 to the section A², upon which the jaw A is formed, and it is provided with a movement toward the jaw A by means of the operating arm or lever C, which is pivoted at e to a projection or hood, E, extending from the part A² of the tool, and which has a projection or roll, e^4 , adapted to bear upon the upper surface of the jaw A'.

The lever or arm C is so pivoted and the projection or roll e^4 so arranged in relation to the pivotal point that upon the movement of the lever away from the handle A³ the projection or roll is moved away from the surface of the lower jaw, A, and permits the upper jaw, A', to be moved upward, or away from the lower jaw, by means of the spring e^3 .

The hood or projection E has a recess which partially covers or incloses the upper jaw, A', and the pivot e and bearing projection or roll e^4 being arranged in relation to the jaw A' and its pivot e^2 , as shown, enables the jaw to be moved against or toward the jaw A with very great force.

In use the end of the pipe is inserted between the two jaws and the jaws brought together thereon and a section of the pipe crimped, and the pipe is moved in relation to the jaws or the jaws to the pipe, crimping successive sections thereof until the pipe has been reduced in diameter and brought to the desired taper.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a crimping-tool, the combination of a jaw, A, having recesses and projections a and a' , the section A², and handle A³, with the jaw A', having the recesses a^2 and projections a^3 , and the arm e' , pivoted at e^2 to the section A²,

and the lever or arm C, pivoted at e to the section E, and having the roll or extension e' , adapted to bear upon the surface of the jaw A', substantially as described.

- 5 2. In a crimping-tool, the combination of a jaw, A, having recesses and projections a a' , the section A², and handle A³, with the jaw A', having the recesses a^2 and projections a^3 , and the arm e' , pivoted at e^2 to the section A², and

the lever or arm C, pivoted at e to the section 10 E, and having a roll or extension, e' , adapted to bear upon the surface of the jaw A', and the spring e^3 , substantially as described.

L. LEROY ROWE.

Witnesses:

F. F. RAYMOND, 2d,
FRED. B. DOLAN.