

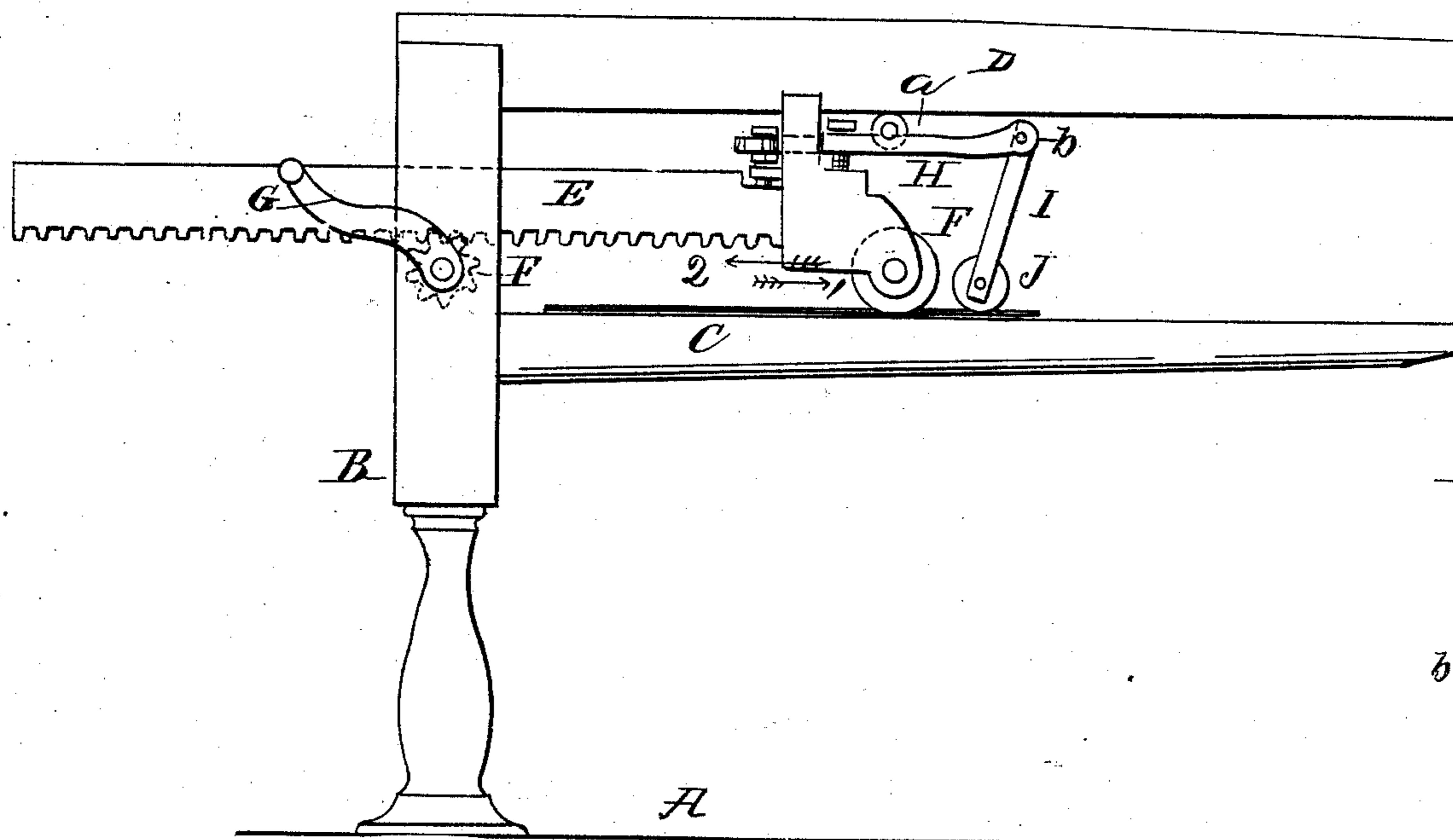
*J. J. Laubach,*

*Grooving Sheet-Metal.*

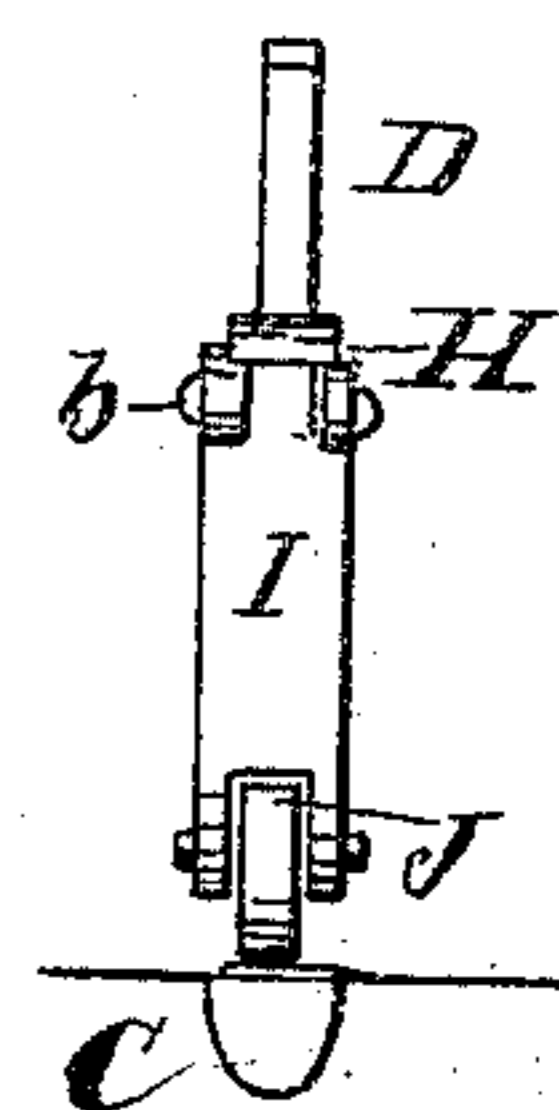
*N<sup>o</sup> 16,337.*

*Patented Jan. 6, 1857.*

*Fig:1.*



*Fig:2.*



# UNITED STATES PATENT OFFICE.

J. J. LAUBACH, OF EASTON, PENNSYLVANIA.

## IMPROVEMENT IN FORMING JOINTS OF SHEET METAL.

Specification forming part of Letters Patent No. 16,337, dated January 6, 1857.

*To all whom it may concern:*

Be it known that I, J. J. LAUBACH, of Easton, in the county of Northampton and State of Pennsylvania, have invented a new and useful Improvement in Machines for Closing the Locks of Sheet-Metal Plates; and I 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, in which—

Figure 1 is a side view of my improvement. Fig. 2 is an end view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in attaching a pressure-roller to the ordinary machine used for closing the locks of sheet-metal plates, said pressure-roller being attached to a swinging bar, and arranged as will be hereinafter fully shown and described, whereby the locks are pressed immediately after being closed and before the plates are removed from the machine.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents a base, to which an upright, B, is attached, and C represents a horizontal bar attached to the upright B, said bar forming the bed on which the lock of the plates are placed.

D represents a horizontal bar attached to the upper end of the upright B, the bar D being parallel with the bar C.

E represents a rack-bar, which works through the upright B. This rack-bar has a roller, F, fitted in one end of it, the periphery of said roller being grooved and resting upon the bar C. A pinion, F, gears into the rack-bar, said pinion being fitted in the upright B, and having its axis extending through the upright, and a crank, G, attached to its end.

H represents a horizontal arm attached to the end of the rack-bar above the roller F. This arm has a friction-roller, a, placed upon it, said roller bearing against the under sur-

face of the bar D. To the outer end of the arm H a pendent bar, I, is connected by a hinge or joint, b, said hinge or joint being so formed that the bar I is allowed to swing inward or toward the upright B, but not outward or from it. To the lower end of the bar I a roller, J, is fitted.

The operation is as follows: The edges of the sheet-metal plates (shown in blue) are bent in the usual manner by any of the machines now used for that purpose, and the edges of the sheets or plates being locked the lock is placed upon the bar C, the roller F being previously moved back near the upright B. The roller F is then moved forward, or in the direction indicated by arrow 1, and the edges of the roller bear upon the sheets or plates at each side of the lock and close it, the roller J, not pressing or acting upon the lock in consequence of the bar I being allowed to move inward. When the lock is closed its whole length, the motion of the rack-bar is reversed, and as the bar moves backward, or in the direction of arrow 2, the roller J bears upon the upper surface of the lock and compresses it.

The rack-bar E and roller F, arranged as herein shown, are well known, and commonly used for closing the locks; but the locks have been heretofore compressed by hand with a mallet after being removed from the machine. By my improvement the locks are compressed before being removed from the machine and immediately after they are closed. Much time and labor are consequently saved by its use.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The roller J, attached to the pendent and swinging bar I, which is connected or jointed to the arm H, substantially as described, for the purpose set forth.

J. J. LAUBACH.

Witnesses:

HENRY PEACOCK,  
A. DE PUE.