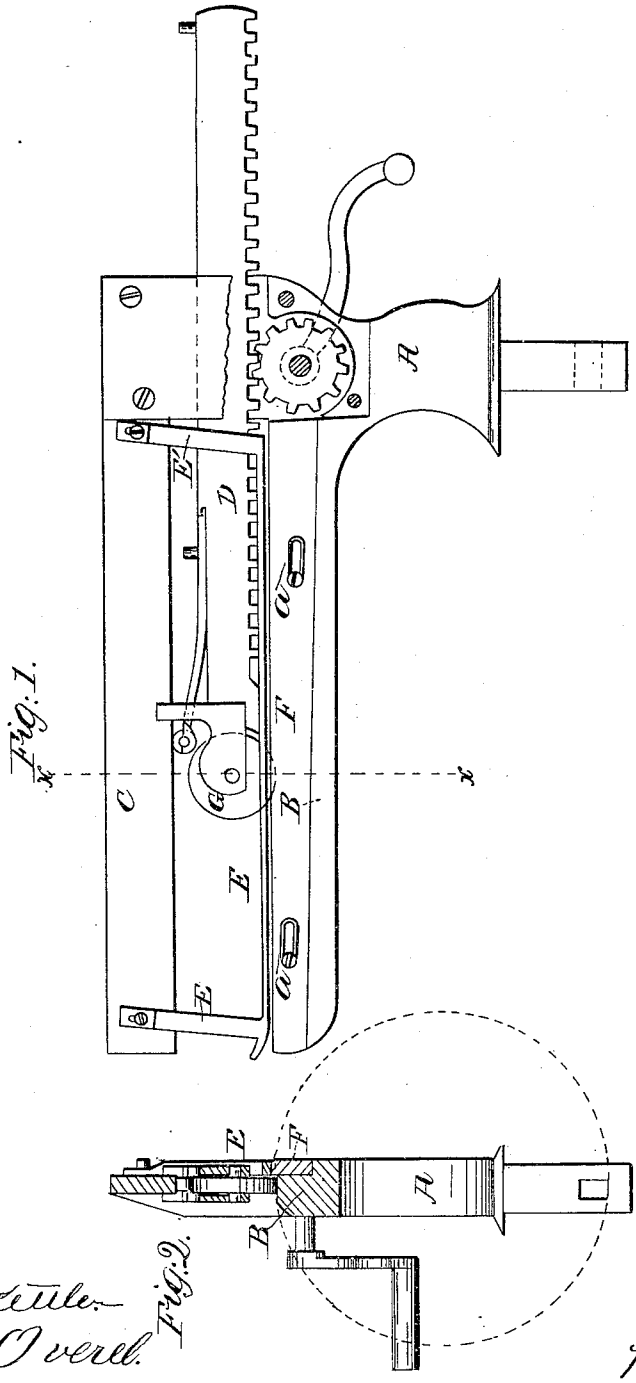
W. SERVISS.

MACHINE FOR GROOVING SHEET METAL.

No. 78,486. Patented June 2, 1868.



Witnesses:
W. C. Aslikette
Wm Dean Overell

Inventor:
Wm Serviss
per Munn & Co.
Attorneys

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United States Patent Office.

WILLIAM SERVISS, OF SIDNEY, OHIO, ASSIGNOR TO JASON McVAY AND JASON S. CAREY.

Letters Patent No. 78,486, *dated June* 2, 1868.

IMPROVED MACHINE FOR GROOVING SHEET METAL.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM SERVISS, of Sidney, in the county of Shelby, and State of Ohio, have invented a new and improved Machine for Grooving Sheet Metal; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing tools for grooving the seams of stove-pipe, sheet-iron stoves, sheet-metal conductors, and for all like purposes for which grooving-tools are used, whereby the seam is formed more rapidly, and upon the inside instead of the outside, as is now commonly the case.

In the accompanying plate of drawings—

Figure 1 is a side view of my invention, a part being broken away to show the construction.

Figure 2 represents a vertical cross-section, taken in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

Upon a metallic upright, A, of sufficient size for strength, are two horizontal parallel metallic arms, B and C.

The arms B and C are in the same vertical line, and are either a part of the upright, A, or are rigidly secured thereto.

The arms B and C are of sufficient length to receive the length of stove-pipe or other article to be grooved, and of sufficient distance apart to receive the rack D between the same.

The rack D is of the form shown in the drawing, supported at one end by the seaming-wheel G, and driven backwards and forwards by a spur-geared wheel, operated by a crank, as shown.

The rack D is guided upon the arm B, upon which the wheel G runs, by guides attached to the rack D, and extending upwards on each side of the upper arm C.

The seaming-wheel G is held down upon arm B by a spring and friction-roller, as shown.

Secured to the arms C, by the supports E′, as shown, is a gauge, E. The gauge E extends the entire length of the arm B, as shown, is parallel thereto, and only so far removed therefrom as to admit the sheet of metal between the arm B and said gauge E. The gauge E is placed near one edge of the arm B, directly over the offset F, the face of the wheel G running against said gauge E and said offset F.

The offset F is a tapering metallic bar, placed in a tapering spline in the side of the arm B, as shown, said spline being widest at the junction of the arm B with the upright, A, as shown.

The offset F is higher than the arm B at the lowest position of said offset. The offset F may be raised or depressed by moving the same forward or backward in the spline in the arm B, being placed upon said arm B with the wider end next to the upright, A.

The offset F is held upon the arm B by screws, as shown, said offset F being furnished with the slots *a*, which permit a sufficient forward motion to allow of the adjustment of the said offset to sheets of metal of different thickness.

The operation is such that the pipe, or other article to be seamed, having been properly formed and the edges locked, said pipe is slipped upon the arm B under the gauge E, with the edge of the lock firmly held against the said gauge E, when, by running the wheel G over the lock, the same is both grooved and folded, and set firmly down, leaving the seam entirely on the inside of the pipe or other article to be seamed

I claim as new, and desire to secure by Letters Patent—

1. The offset F, substantially as shown and described, in combination with rack D, wheel G, and arm B, as and for the purpose set forth.

2. The gauge E, constructed and operating substantially as and for the purpose shown and described, in combination with the arms C and B, and wheel G, all as set forth.

WILLIAM SERVISS.

Witnesses:

SAMUEL McCULLOUGH,

T. F. WILKINSON.