G. CHOATE.

Pipe-Elbow Seaming Machine.

No. 196,785. Patented Nov. 6, 1877.

Fig: 1.

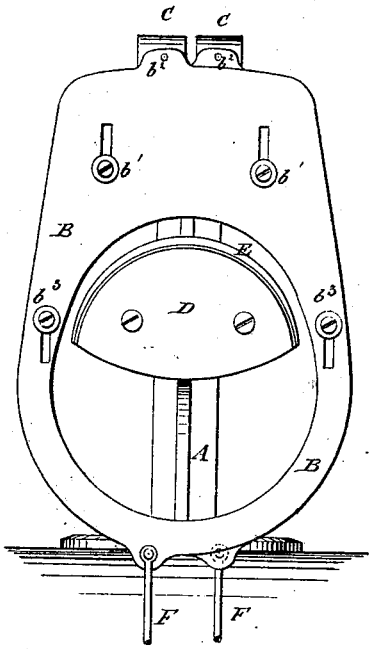


Fig: 2.

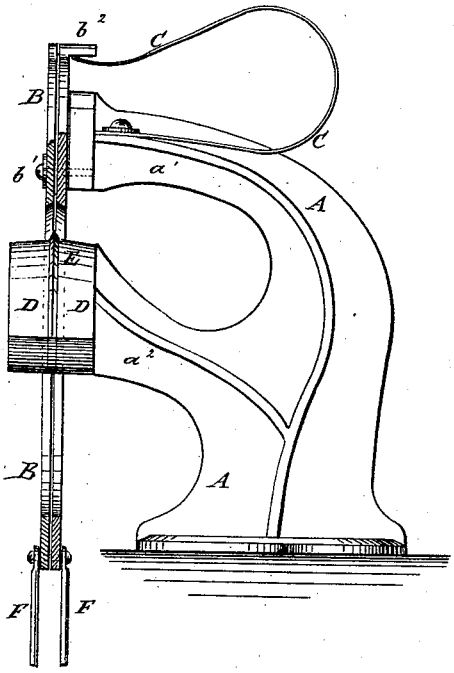
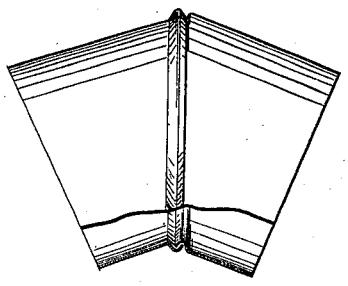


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GREENE CHOATE, OF EAST SAGINAW, MICHIGAN.

IMPROVEMENT IN PIPE-ELBOW-SEAMING MACHINES.

Specification forming part of Letters Patent No. **196,785**, dated November 6, 1877; application filed October 6, 1877.

To all whom it may concern:

Be it known that I, GREENE CHOATE, of East Saginaw, in the county of Saginaw and State of Michigan, have invented a new and useful Improvement in Machine for Setting Seams in Pipe-Elbows, of which the following is a specification:

Figure 1 is a front view of my improved machine. Fig. 2 is a side view of the same, the collars being shown in section. Fig. 3 is a side view of a pipe-elbow, part being cut away to show the construction of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for setting the seams of pipe-elbows, which shall be simple in construction, convenient in use, and effective in operation, forming a firm, strong, and close seam.

The invention consists in the combination of the two-armed standard, the two collars, the two springs, the clamping-blocks and their plate, and the treadle-rods with each other, as hereinafter described, to adapt them for use as set forth.

A is a standard, the base of which is designed to be bolted to the bench. The standard A is made with two forwardly-projecting arms, a^1 a^2, arranged the one directly over the other.

B B are two collars or plates the upper parts of which are slotted vertically to receive the bolts b^1, by which they are secured to the face of the upper arm a^1 of the standard A, and at the same time allowed to have a short vertical movement.

Upon the rear edges of the upper ends of the collars B B, and upon the opposite sides ot their vertical central lines, are formed lugs b^2, to receive the upper ends of the U-springs C C, which are placed side by side, and the lower ends of which are bolted to the upper side of the forward end of the upper arm a^1 of the standard A.

The lower parts of the collars B B are held in place against each other by screws or bolts b^3, which pass through short vertical slots in the forward collar, and through holes in the rear collar. The upper parts of the apertures of the collars B B are made of the size and curve of the pipe to be operated upon, and are beveled upon their adjacent edges, so as to form a V-groove between them, as shown in Fig. 2.

To the face of the lower arm a^2 of the standard A are bolted two blocks, D D, between which is clamped a steel plate, E. The upper edges of the blocks D D are curved to correspond with the curve of the pipe to be operated upon, and are beveled to correspond with the angle of the elbow.

The edge of the plate E projects a little above the blocks D D, and is beveled upon its opposite sides to give it a V form, as shown in Fig. 2.

To the lower ends of the two collars B are attached the upper ends of two rods, F F, the lower ends of which are designed to be connected with two treadles at the floor, so that the collars B B can be drawn down together or successively by the operator with his foot.

In using the machine, the parts or sections of an elbow are passed through the aperture of the collars B B in such a way as to bring the seam to be closed directly over and on the edge of the plate E, which projects above the blocks D D. The rear collar B is then drawn down, forming one bend of the seam, and holding the inner section. The forward collar is then drawn down, with two or three smart blows upon the other treadle with the foot, closing the seam.

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

The combination of the two-armed standard A, the collars B B, the springs C C, the blocks and plate D D E, and the treadle-rods F F with each other, substantially as herein shown and described, to adapt them for use as set forth.

GREENE CHOATE.

Witnesses:

D. R. RING,

WILLIAM C. HOWLETT.