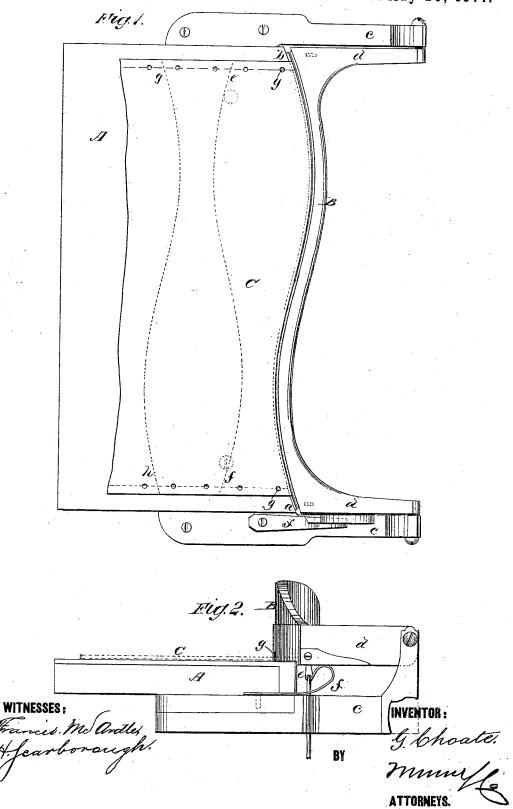
G. CHOATE.

DEVICE FOR CUTTING SHEET-METAL FOR CURVED PIPE-ELBOWS.

No. 191,312.

Patented May 29, 1877.



UNITED STATES PATENT OFFICE.

GREENE CHOATE, OF EAST SAGINAW, MICHIGAN.

IMPROVEMENT IN DEVICES FOR CUTTING SHEET METAL FOR CURVED PIPE-ELBOWS.

Specification forming part of Letters Patent No. 191,312, dated May 29, 1877; application filed April 30, 1877.

To all whom it may concern:

Be it known that I, GREENE CHOATE, of East Saginaw, county of Saginaw, and State of Michigan, have invented a new and useful Improvement in Shears for Cutting Sections for Curved Sheet-Metal Elbows, of which the following is a specification:

Figure 1 is a plan view. Fig. 2 is a side

elevation.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide

shears for cutting the curved edges of sections of curved stove-pipe elbows.

In the drawing, A is the bed of the shears, having the cutting-edge a b, which is formed on an ogee or reversed curve. Arms c project from the bed, and to them the arms d of the curved shear-blade B are pivoted. The curved shear-blade B is the counterpart of the curved cutting-edge of the bed A. Eyes c project downward from the arms d of the shear-blade B, for receiving rods that connect the same with a foot-lever. A spring, f, is attached to one of the arms c, and bears against a projection on one of the arms c, for throwing the curved shear-blade B upward.

Pins g project upward from the bed for engaging holes in the sheet to be cut by the shears. A sheet, C, of metal, having been punched by another machine, is placed upon the bed of the shears, with two of its perforations on the pins g, as indicated by the drawing, when the curved shear-blade B is forced down by means of the foot-lever, and the sheet C is severed along the line of the cutting-edge a b.

The sheet is reversed and cut upon the dotted line ef. It is again reversed and cut upon the line gh. The sheet is thus cut by the shears into sections that may be formed into a curved elbow without trimming.

Having thus fully described my invention, I claim as new and desire to secure by Let-

ters Patent-

The bed A, having the curved cutting-edge a b, arms c, and guide-pins g, and the curved shear-blade B, having arms d, in combination, substantially as shown and described.

GREENE CHOATE.

Witnesses:

FREDERICK HARTMAN, F. J. MOELLER.