

(No Model.)

G. HIPWELL.
STOVE PIPE BRAKE.

No. 246,882.

Patented Sept. 13, 1881.

Fig. 1

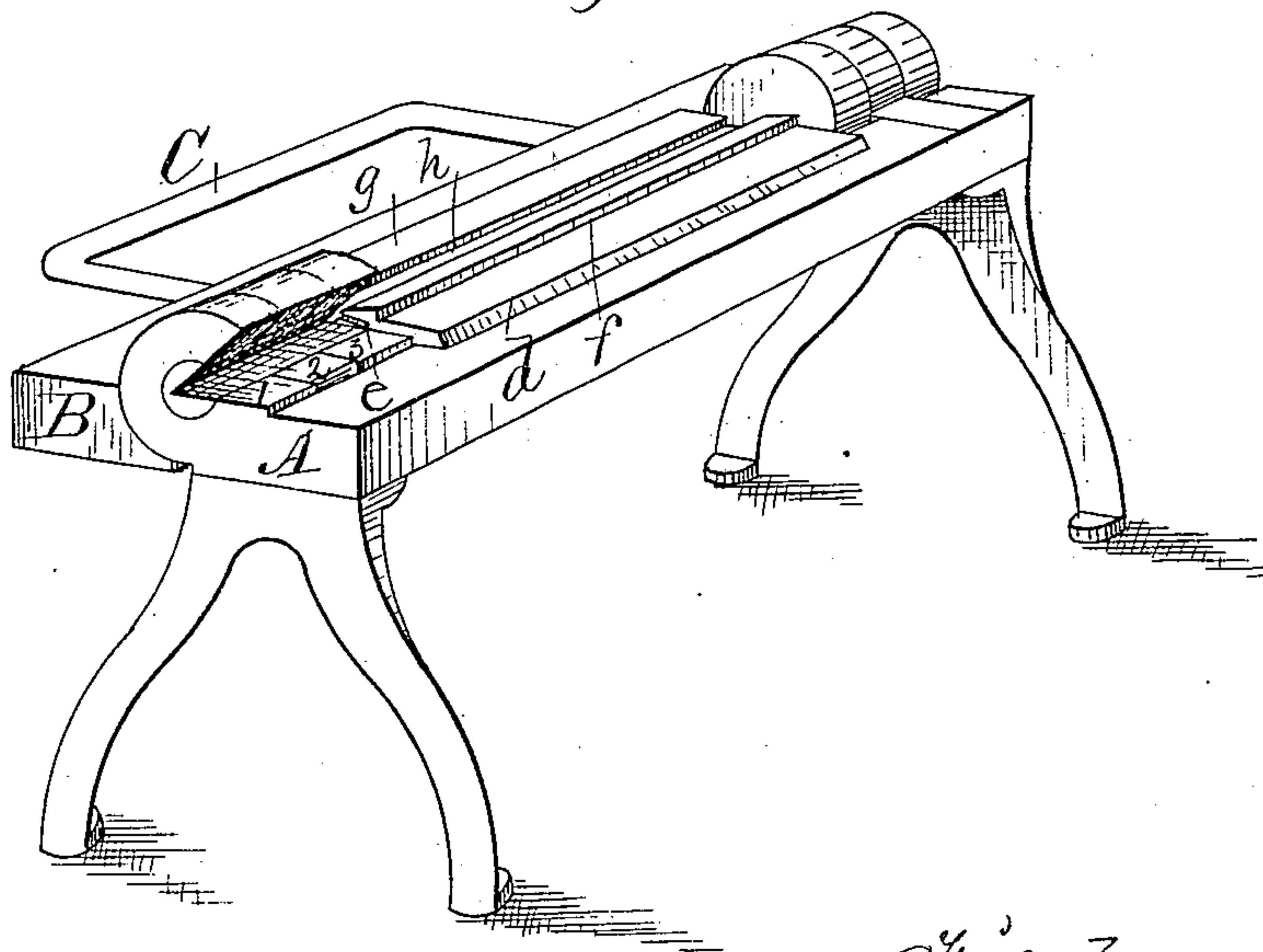


Fig. 3

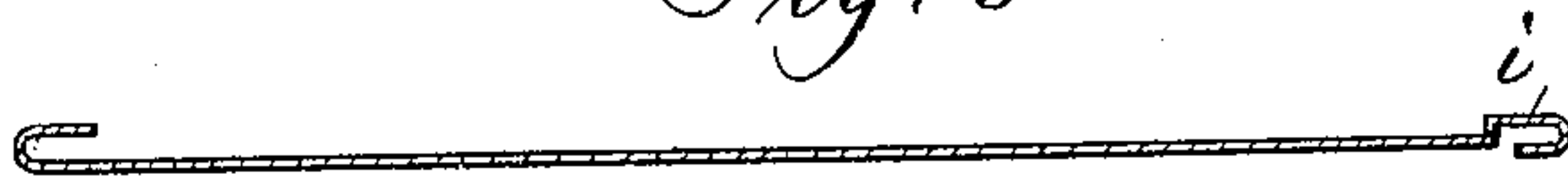


Fig. 2

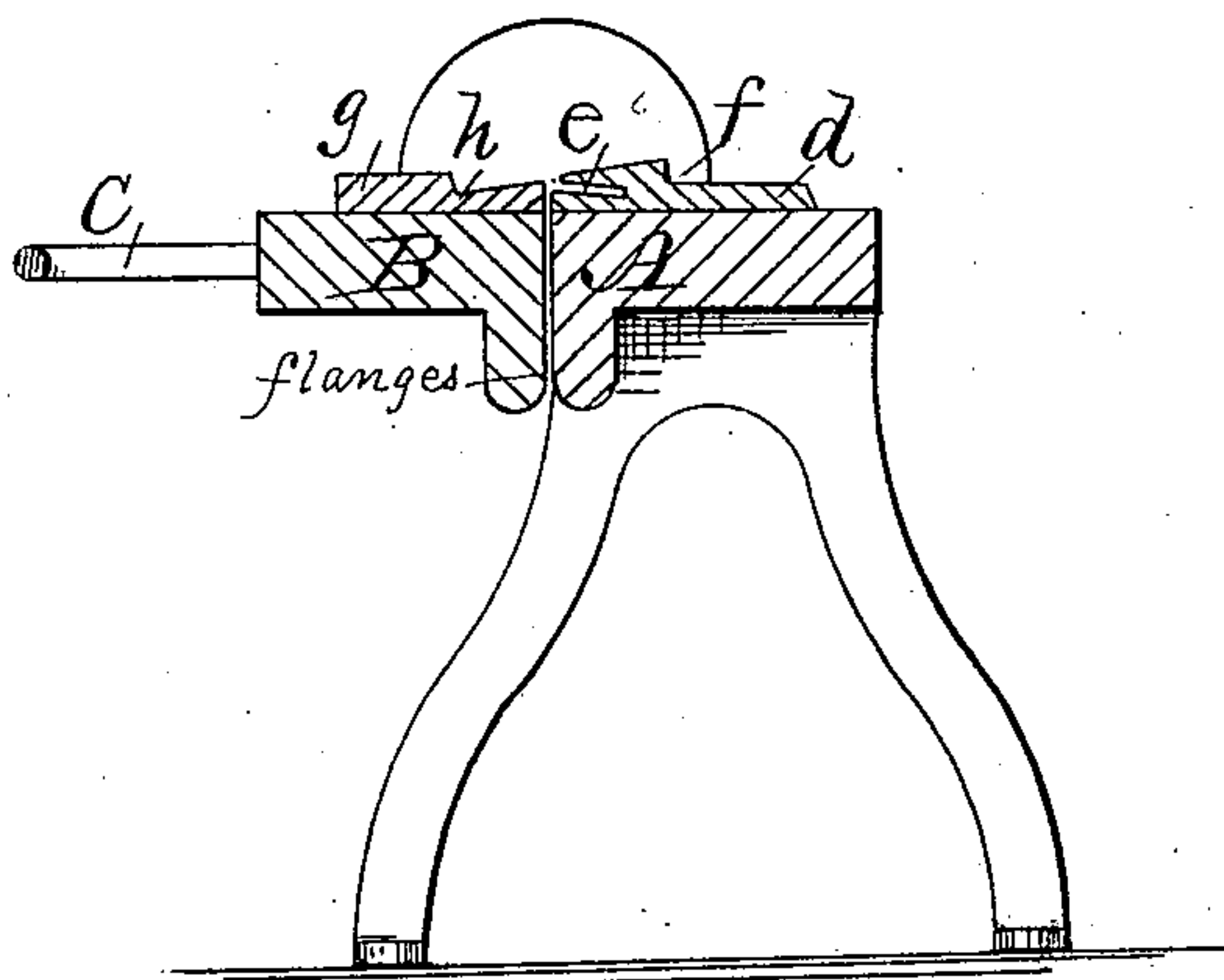
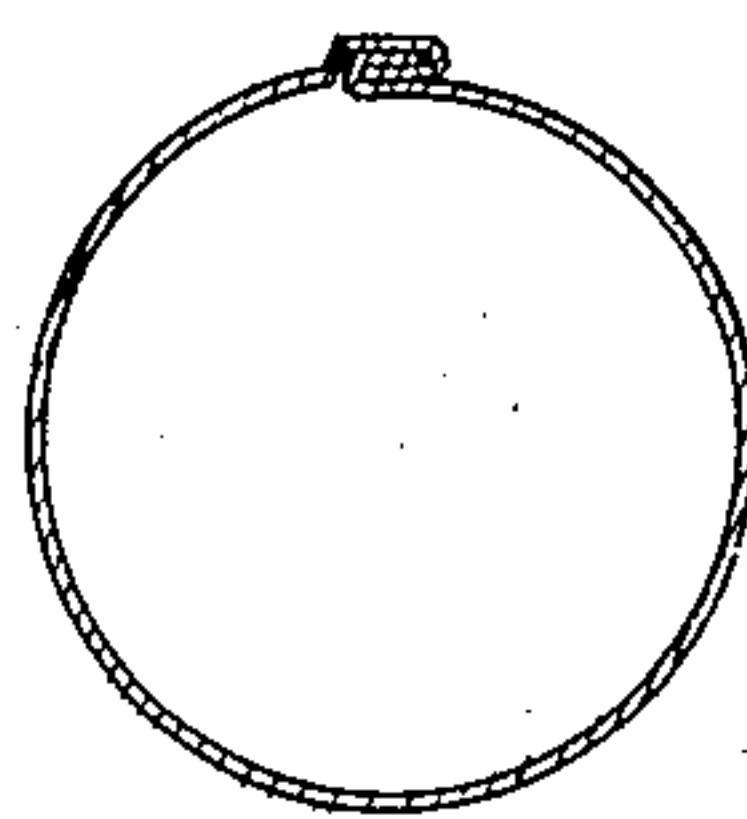


Fig. 4



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE HIPWELL, OF DES MOINES, IOWA, ASSIGNOR TO J. F. MASON, OF
SAME PLACE.

STOVE-PIPE BRAKE.

SPECIFICATION forming part of Letters Patent No. 246,882, dated September 13, 1881.

Application filed March 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HIPWELL, of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Machine for Edging Stove-Pipe Blanks, of which the following is a specification.

My invention relates to that class of machines known as "stove-pipe brakes," and used in making surface lap-joints.

It consists in forming and applying a pair of shaping die-plates to the parallel edges of the brake in such a manner that a tubular edge can be readily formed thereby on one of the sides of a stove-pipe blank to produce complete blanks that can be advantageously nested in packing and shipping, and that can have their edges slipped together and then simply subjected to pressure to form neat, strong, and durable joints or seams and complete pieces of pipe, as hereinafter fully set forth.

Figure 1 of my drawings is a perspective view of my complete machine. Fig. 2 is a transverse section of the same. Fig. 3 is a transverse section of a stove-pipe blank edged by the machine. Fig. 4 shows the edges of the blank slipped together, as required to form a piece of pipe. Jointly considered, they clearly illustrate the construction and operation of my complete invention.

A represents the horizontal base-piece and bench of my machine. It is preferably made of cast-iron, and supported upon suitable legs, that may be attached in any suitable way.

B is a horizontal bar and brake corresponding in size and form with the base A, to which it is hinged in such a manner that it can be readily revolved on its axis and its top face brought into an inverted position and flat upon the top of the stationary part A by means of a suitable lever-handle, C, that extends from the movable part B.

d is a die-plate, preferably made of steel, fixed on the top face of the base A. It has a longitudinal groove, *e*, in its inner edge, that is designed to receive the plain edge of a stove-pipe blank, and also a shoulder, *f*, on its top surface for shaping the sheet-metal blank when the sheet metal is pressed upon it by means of a mating-die carried by the revolving part B.

g is the counter-die plate fixed to the top face of the hinged brake-bar B. It has a lon-

gitudinal groove, *h*, corresponding with the elevation and shoulder *f* of the plate *d*.

In the practical operation of my stove-pipe brake thus constructed I simply place the plain straight edge of a sheet-metal stove-pipe blank into the groove *e* of the die-plate *d* and allow the body of the blank to rest upon the hinged brake B, and when the blank is thus placed and in a square position relative to the machine, and its edge inserted in the groove of the fixed die-plate, I revolve the brake B upward and carry the stove-pipe blank along, so that it will move concentric to the axis of the hinged brake and form a bend in the sheet metal in line with the axis of the brake and double the sheet flat upon the fixed die-plate, where, by pressure of the operator, it will be clamped between the mating-dies and a short bend and shoulder formed in the sheet metal corresponding with the shoulder *f* of the fixed die, as required to produce a tubular edge, *i*, on the one side of the blank, as shown in Fig. 3, that is adapted to receive the opposite and parallel edge of the same blank, that is simply folded backward in a common way, so that it can be readily introduced into the tubular edge, as illustrated by Fig. 4.

To facilitate the removal of the stove-pipe blank from the machine and die-plates after a tubular edge has been formed, I have provided openings 1 2 3 in the knuckles of the hinge at one end of the machine, through which openings the tubular edge can be passed out longitudinally when the machine is open, and thus readily disengaged from the form or die-plate around which it was wrapped and pressed.

I claim as my invention—

In a machine for edging sheet metal, the combination of the fixed die-plate *d*, having a longitudinal groove, *e*, in its edge and a shoulder, *f*, on its top surface, and the counter-die plate *g*, having a longitudinal groove, *h*, in its top face and carried by a hinged revolving brake-bar, substantially as shown and described, to operate in the manner set forth, for the purposes specified.

GEORGE HIPWELL.

Witnesses:

ROBT. L. CLARKE,
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