

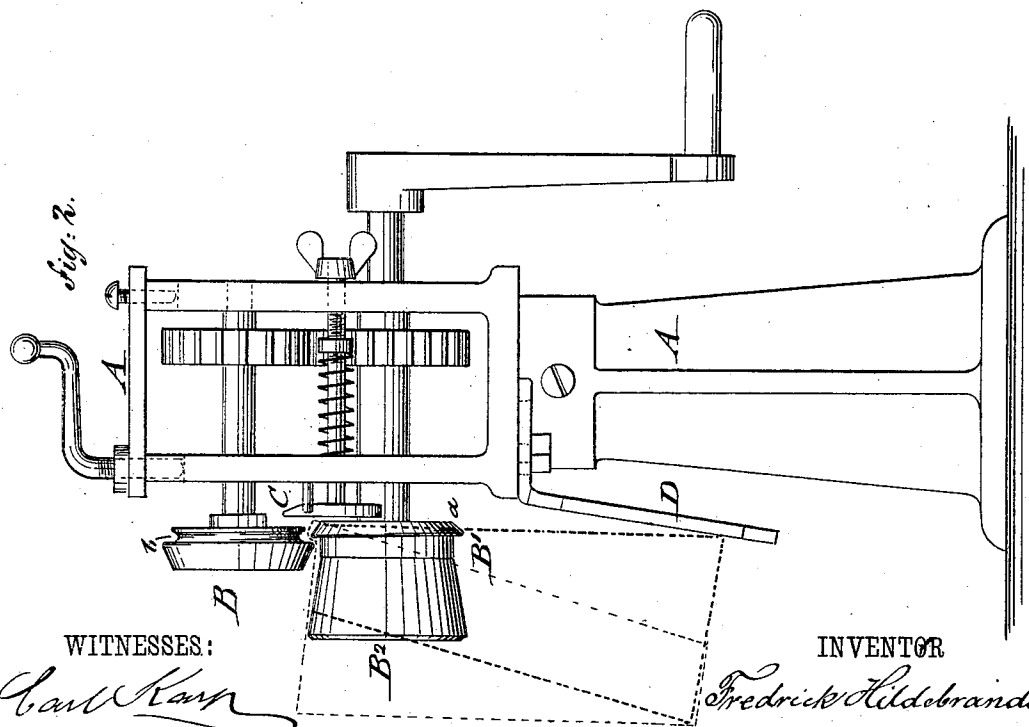
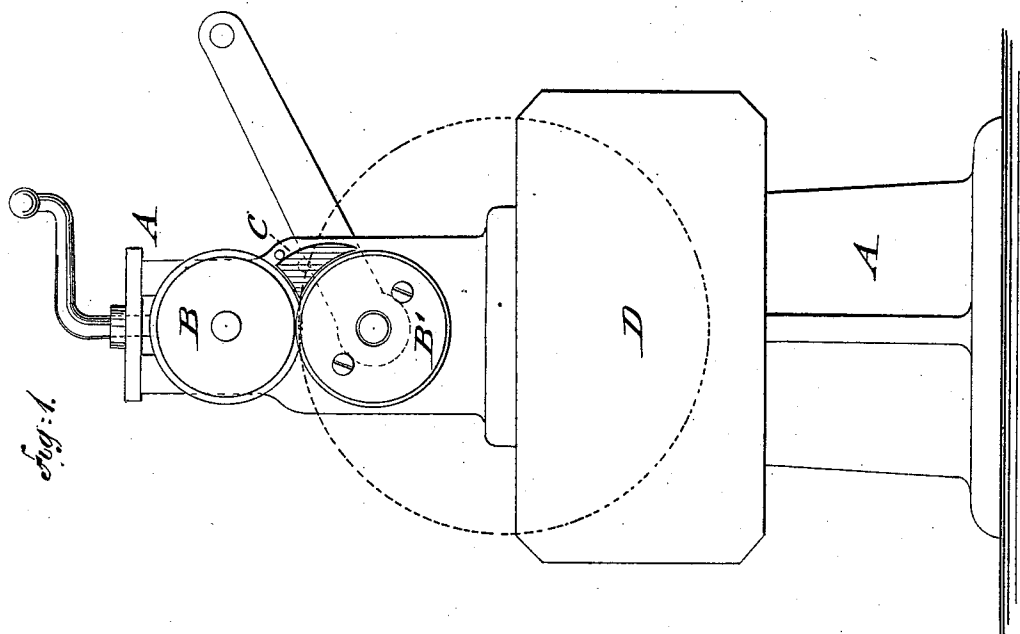
(No Model.)

F. HILDEBRANDT.

MACHINE FOR BEADING STOVE PIPE ELBOWS.

No. 247,347.

Patented Sept. 20, 1881.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FREDRICK HILDEBRANDT, OF NEW YORK, N. Y.

## MACHINE FOR BEADING STOVE-PIPE ELBOWS.

SPECIFICATION forming part of Letters Patent No. 247,347, dated September 20, 1881.

Application filed October 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK HILDEBRANDT, of the city, county, and State of New York, have invented certain new and useful  
5 Improvements in Machines for Beading Stove-Pipe Elbows, of which the following is a specification.

This invention relates to an improved machine for beading the edges of the sections of  
10 stove-pipe elbows, so that this work may be accomplished around the entire edge of a section in a uniform and rapid manner without requiring the exercise of special skill, as required in working the beading-machines in general use.

In the accompanying drawings, Figure 1 represents an end elevation, and Fig. 2 is a side elevation, of my improved machine for beading the sections of stove-pipe elbows.

Similar letters of reference indicate corresponding parts.

A in the drawings represents the supporting-frame of my improved beading-machine, which is provided with the customary upper and lower beading-rolls, B B', which are revolved by means of a hand-crank and transmitting-gearing in the usual manner. The upper beading-roll, B, is adjusted higher or lower by means of a tap crank and screw pressing upon the journal-bearing of the shaft of the upper roll. An adjustable gage, C, serves to regulate the distance of the bead from the edge of the pipe-section, as customary in this class of machines. The lower beading-roll is provided with a forward-extending guide-cylinder, B<sup>2</sup>, as shown clearly in Fig. 2. In place of the same a loose roll placed upon the forward-extended shaft of the lower roll, B', may be used. An inclined guide-plate or apron, D, is rigidly attached to the lower part of frame A, vertically below the lower beading-roll, B'. The lower beading-roll, B', is provided with an annular raise, *a*, at the inner end, having an angle of about forty-five degrees or less, and the upper roll, B, with an annular groove, *b*, of corresponding angle and depth, as shown in Fig. 2. The raise *a* and groove *b* produce the bending of the bead by one operation. This feature secures, in connection with the extension guide-cylinder and fixed apron, the beading of an elbow-section by one revolution of the same between the rolls,

In beading the section of a stove-pipe elbow the wider portion of the same is first introduced between the beading-rolls and allowed to rest upon the extension cylinder or roll B<sup>2</sup>. By turning the actuating-crank the edge of the section is carried along the gage C and between the beading-rolls and is beaded, the workman simply holding the section of elbow in contact with the sliding gage C. When by the rotation of the beading-rolls the narrower half of the pipe-section is passed through between them the wider part forms contact with the lower guide-plate or apron and is guided along the same, so as to allow the proper formation of the narrower part of the elbow-section. In this manner an elbow-section can be beaded in an accurate and uniform manner, without requiring any special skill in holding the same for the proper action of the beading-rolls thereon.

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

1. As an improvement in beading-machines, the combination of a pair of beading-rolls, B B', the lower one of which is provided with a forward-extending extension cylinder or roll, B<sup>2</sup>, adapted to support the elbow-section, an adjustable gage, C, and a fixed inclined gage-plate or apron, D, placed below the lower beading-roll, substantially as described.

2. In a beading-machine, the combination of the lower beading-roll, B', having an annular raise, *a*, made at an angle of forty-five degrees or less, the upper roll, B, having an annular groove of corresponding concavity, said lower roll being provided with a forward-extending extension cylinder or roll, B<sup>2</sup>, adapted to support the elbow-section, an adjustable gage, C, and a fixed inclined gage-plate or apron, D, placed below the lower beading-roll, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 13th day of October, 1880.

FREDRICK HILDEBRANDT.

Witnesses:

PAUL GOEPEL,  
CARL KARP.