E. Norton.

Blanks for Pipe Elbows.

No. 89,426. Patented Apr. 27, 1869.

Fig 1.

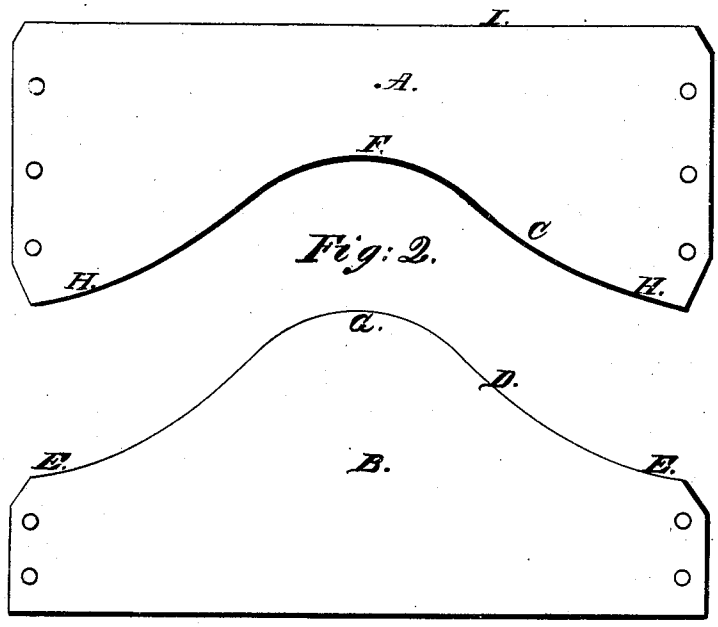
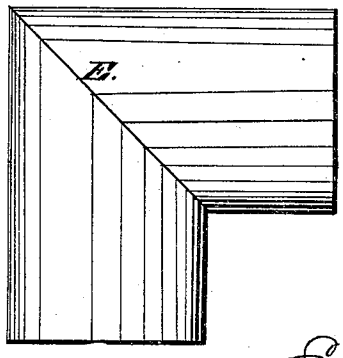


Fig: 2.

Fig: 3.



Witnesses.

John T. Brooks

E. Greene Collins

Inventor.

E. Norton

per Munn & Co

Attys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWIN NORTON, OF TOLEDO, OHIO.

IMPROVEMENT IN BLANKS FOR STOVE-PIPES.

Specification forming part of Letters Patent No. **89,426**, dated April 27, 1869.

To all whom it may concern:

Be it known that I, EDWIN NORTON, of Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Improvement in the Manufacture of Pipe-Elbows; 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 improvements in the manufacture of pipe-elbows, whereby it is designed to simplify and cheapen the cost of the same.

It consists in the production of the blanks of the proper form for both parts of the elbow from one sheet of metal by dies so arranged as to cut the same at one blow and without waste of metal, as hereinafter more fully specified.

Figure 1 represents a plan of the form of the blank for one part. Fig. 2 represents a plan of the form of the blank for the other part, and Fig. 3 represents an elbow in elevation.

Similar letters of reference indicate corresponding parts.

I provide dies under any suitable arrangement for cutting the blanks A B, by severing them from each other on the lines C D, having the proper configuration or curvatures to form the joint E of the pipe, when the said parts are bent into the tubular form united by the perforated edges thereof, and joined together by reversing the application of the said parts A and B—that is to say, the points E will be joined to the part A at F, and the part G of B will be joined to the points H of the part A. By this arrangement of the blanks an accurately-fitting joint may be constructed by forming them into tubes, and lapping and joining the said curved edges C D. I propose to construct these blanks by suitably-arranged machinery, preferably attached to or arranged in conjunction with the machinery for forming the sheets, whereby an economy may be effected, and the blanks may thus be supplied to the trade in a manner to be packed and shipped at less expense of room and lower grades of freight, requiring to be joined and finished only by the retailer, thereby obviating the necessity to him of providing the necessary heavy and expensive machinery for forming the said blanks.

To save the necessity of first cutting the sheets into the rectangular pieces represented by the two parts A and B, I propose to so arrange the dies as to separate them from the said long sheets on the line I at the same time that the separation is made on the lines C D. The common method of forming these parts is to take separate sheets of metal and cut them with the shears to produce the shape of the edges C D, which involves a great loss of metal as well as of labor.

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

The herein-described blanks for stove-pipe elbows, when the edges C D are separated from each other by dies, as specified, as an improved article of manufacture.

The above specification of my invention signed by me this 26th day of February, 1869.

EDWIN NORTON.

Witnesses:

HORACE THACHER,

CHS. C. DOOLITTLE.