S. SMITH.

Stove-Pipe Elbows.

No. 149,958. Patented April 21, 1874.

Fig: 1

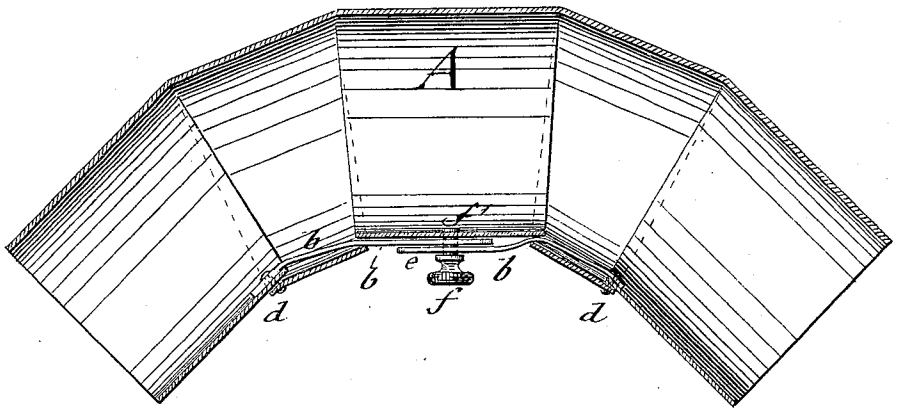


Fig: 2

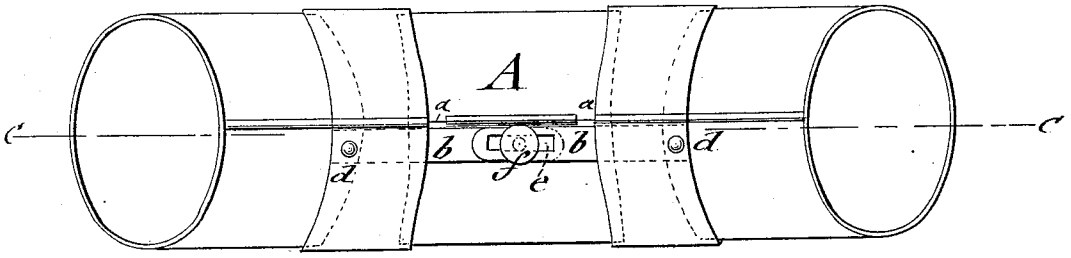
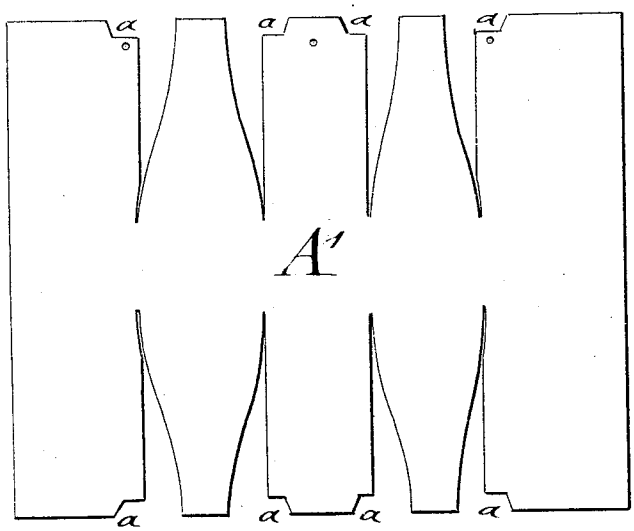


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL SMITH, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN STOVE-PIPE ELBOWS.

Specification forming part of Letters Patent No. **149,958**, dated April 21, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, SAMUEL SMITH, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Stove-Pipe Elbow, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of my improved stove-pipe elbow, taken on the line *c c*, Fig. 2. Fig. 2 is a side view of the same, showing its method of adjustment; and Fig. 3, a top view of the blank used for forming my elbow.

Similar letters of reference indicate corresponding parts.

The invention relates to a stove-pipe elbow composed of sections adapted to be adjusted at different angles to each other, as hereinafter described.

In the drawing, A represents the stove-pipe elbow, which is obtained from a blank, A′, formed by cutting in a rectangular sheet, symmetrically to the longitudinal axis of the same, and on each side of a central longitudinal strip, five sectional pieces or strips, of which the central and outer strips are of rectangular shape, the intermediate ones being made with curved sides, tapering toward the end, as shown in Fig. 3. The outer strips are of greater width than the middle strips, and are provided, together with the central strip, with small recesses *a* at the corners, which come in contact with the intermediate tapering strips. The blank is formed on a die of suitable shape, and, by means of suitable machinery, into an elbow, in such a manner that the tapering sections overlap neatly and accurately the rectangular sections, as shown in Fig. 1. The corresponding ends of the strips are made to overlap each other, so as to interlock in the usual manner, and form thereby adjustable sections, which may be extended or contracted by bending the elbow in either direction, the central connecting-strip producing the flexibility of the parts.

For the purpose of adjusting the elbow to pipes placed under various angles, I attach narrow strips *b*, by rivets *d*, to the contact-points of the outermost and tapering sections near the overlapping joints of the same, and pass them under the intermediate sections toward the outside of the central section of the elbow. The strips *b* are of suitable length, and provided with slots *e* in their projecting ends. A thumb-screw, *f*, passes through slots *e* into a central perforation, *f′*, of the middle elbow-section, and serves to bind strips *d*, and thereby the outer sections, firmly into any position, according to the angle required. The recessed corners *a* of the middle section admit of the play of the movable sections thereon, so as not to obstruct the easy adjustment of the elbow.

The adjustability, neatness, and cheapness of construction make this stove-pipe elbow superior to the rigid elbows, which connect only pipes placed under right angles, and form a very useful article for its various applications to domestic and industrial purposes.

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

An adjustable stove-pipe elbow constructed of central and outermost rectangular sections, with overlapping intermediate sections, of which the outer sections are riveted to slotted connecting-strips, and adjustable by a thumb-screw to the central strip, substantially in the manner and for the purpose described.

SAMUEL SMITH.

Witnesses:

PAUL GOEPEL,

T. B. MOSHER.