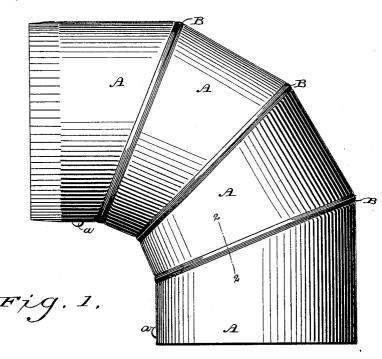
(Model.)

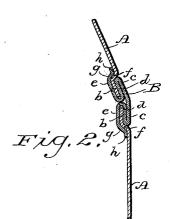
## T. S. EVANS & F. R. JACKES.

STOVE PIPE ELBOW.

No. 394,479.

Patented Dec. 11, 1888.

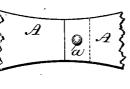




e A

2 Witnesses Geo. W. Young. A Apm Rhug.

Fig.4.



Inventors' Thomas S. Evans, Franklin R. Jackes, By ftont Hundawo Attorneys.

7.3.

N. PETERS. Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

### THOMAS S. EVANS AND FRANKLIN R. JACKES, OF MILWAUKEE, WISCONSIN.

#### STOVE-PIPE ELBOW.

SPECIFICATION forming part of Letters Patent No. 394,479, dated December 11, 1888. Application filed December 16, 1887. Serial No. 258,074. (Model.)

#### To all whom it may concern:

Be it known that we, THOMAS S. EVANS and FRANKLIN R. JACKES, both of Milwaukee, in the county of Milwaukee, and in the State of

- 5 Wisconsin, have invented certain new and useful Improvements in Stove-Pipe Elbows; and we do hereby declare that the following is a full, clear, and exact description thereof. Our invention relates to stove-pipe elbows,
- 10 and will be fully described hereinafter, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a stove-pipe elbow constructed according to our invention. Fig. 2 is a detail sectional

- 15 view on the line 2 2 of Fig. 1. Fig. 3 is a detail view of the inner side of our device, presenting an inner face view of one of the joints; and Fig. 4 is a detail of one of the elbow-sections.
- 20 Our elbows are what are known as "pieced elbows," consisting of several sections, as A A A A, which are united by overlapping, as shown in Fig. 4, in the ordinary manner, and said overlapping portions may be united by
- 25 a rivet, *a*, though this is not absolutely necessary.

B shows one of our joints, and this is made of a single strip of sheet metal bent, as best shown in Fig. 2, by suitable machinery, (which

- 30 forms no part of our present invention.) and at the same time the adjacent edges of the sections A A are correspondingly bent and countersunk, as shown at *b b*, so that the outer folded portions, *c d*, of the joint-strip B shall
- 35 lie practically in the same outer planes with the adjacent outer surfaces of the sections A A without any projecting ridge, which ridge would be objectionable, as being clumsy in appearance and as forming a dust-trap. The
- 40 edges of the strip B are bent around the edges b b of the sections A A, as shown at e e, and lie closely against the inclined portions f f of said sections A A, as shown at g g, while the extreme edges of the said strip B fit snugly up
- 45 against the said sections A A just at the point where their inclined surfaces begin, as shown at h h.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

ters Patent, is— 50 1. In a stove-pipe elbow, the combination of the pieced sections with strips for uniting the adjacent edges of the same, said strips consisting of single pieces of sheet metal bent or folded at each longitudinal edge into three 55 thicknesses, and with the edges of each of the pieced stove-pipe sections secured between two adjacent folds of the edges of said strips, substantially as shown and described.

2. In a stove-pipe elbow, the combination of 60 the pieced sections A A, having depressed or countersunk edges  $b \ b$ , with the strips B, for uniting the same, said strips\_being bent or folded at each edge into three thicknesses, the edges of the sections A A being held between 65 two adjacent folds of the edges of said strips, and the outer folds of said strip-edges being pressed closely together and fitting over the countersunk or depressed edges of the sections A A, and filling up the space between 70 the outer surfaces of the non-depressed portions of said sections A A at practically the same planes therewith.

3. In a stove-pipe elbow, the combination of the pieced sections A A A, having depressed 75 or countersunk edges b b, with separate independent strips B B, for uniting the same, each of said strips being bent so as to incline toward each side from the center, and each inclined side thereof being folded into three 80 thicknesses, two of which are pressed together, while between the other fold and the double fold just named there is interposed the depressed or countersunk edge b of the adjacent section A, substantially as set forth. 85

In testimony that we claim the foregoing we have hereunto set our hands, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

THOMAS S. EVANS.

FRANKLIN R. JACKES.

Witnesses: H. G. UNDERWOOD,

N. E. OLIPHANT.