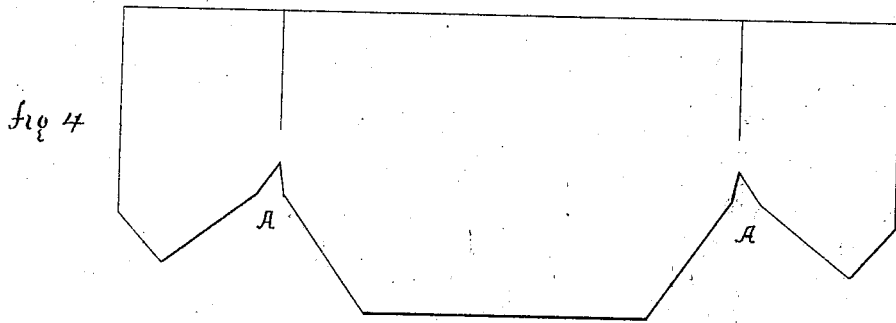
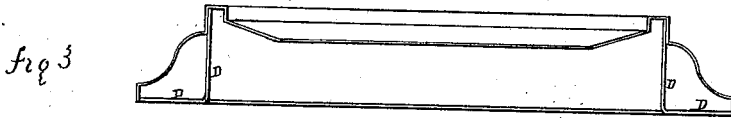
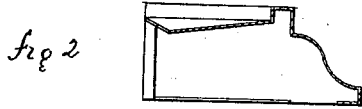
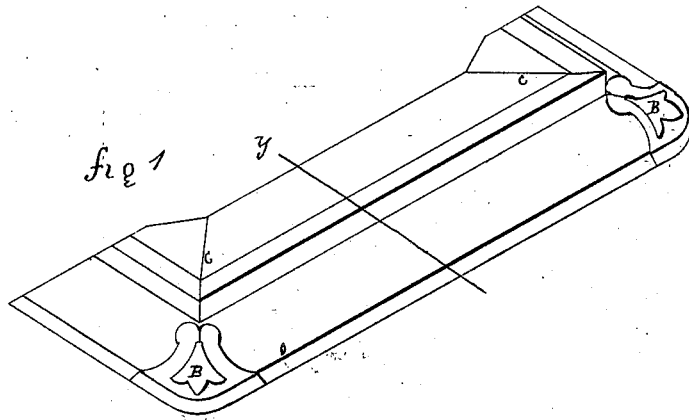


H. ADLER.
Fender for Fire-Places.

No. 196,738.

Patented Nov. 6, 1877.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY ADLER, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN FENDERS FOR FIRE-PLACES.

Specification forming part of Letters Patent No. **196,738**, dated November 6, 1877; application filed October 1, 1877.

To all whom it may concern:

Be it known that I, HENRY ADLER, of Pittsburg, in the county of Allegheny, State of Pennsylvania, have invented a new and useful Improvement in Sheet-Metal Fenders; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in the construction of sheet-metal fenders; and consists in making the front, ends, and apron of one piece, and combining therewith corner-pieces.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

In the accompanying drawings, which form part of my specification, Figure 1 is a perspective view of my improvement. Fig. 2 is a vertical and transverse section of the same at line *y* of Fig. 1. Fig. 3 is a back elevation. Fig. 4 is a plan representing the manner of cutting the sheet prior to bending it into the form represented in Fig. 1.

The portion of the metal cut out at A in Fig. 4 is used for forming the corner-pieces B.

The curving for ornamentation is accomplished by means of the machine for which Let-

ters Patent were granted me September 10, 1872, No. 131,239.

The joints at *c* are formed in the ordinary manner well-known to workers in sheet metal. The corner-pieces B are stamped, and then riveted in position, as shown in Fig. 1. The angular braces D are then secured in position, as shown in Fig. 3, which impart strength and stiffness to the fender. After constructing the fender as described it is then enameled. The curvatures and braces impart strength and stiffness to the fender as a whole.

The advantage of my improvement consists in economy of stock and lightness of the article when constructed, the latter being a great consideration with housekeepers.

Having thus described the nature, and construction, and advantages of my improvement, what I claim as of my invention, and desire to secure by Letters Patent of the United States, is—

A sheet-metal fender, the front, apron, and ends being constructed in one piece, curved, bent, and braced, substantially as herein described.

HENRY ADLER.

Witnesses:

A. C. JOHNSTON,
A. J. DAVIS.