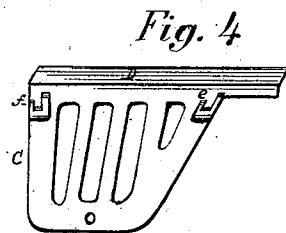
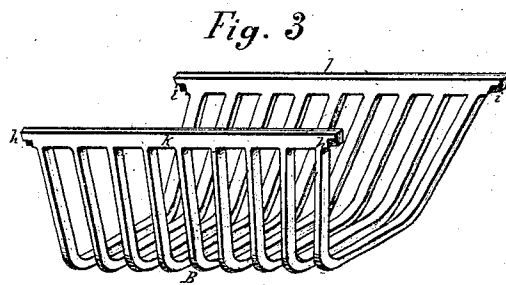
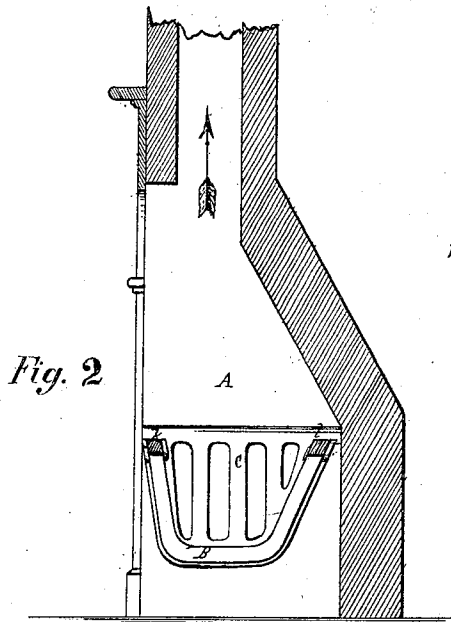
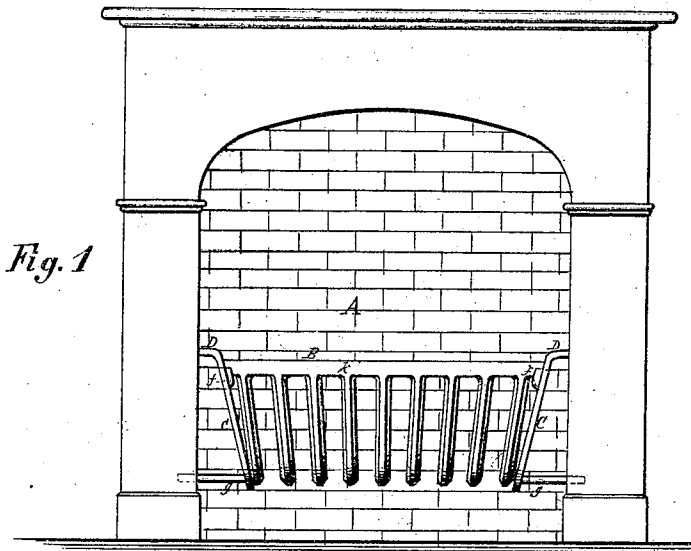


J. W. THORNILEY.

Fire-Place Grate.

No. 112,986.

Patented Mar. 21, 1871.



Witnesses
Edw. Thomas
Chas. H. Haden

Inventor
James W. Thorniley
By J. L. Johnston, his attorney

United States Patent Office.

JAMES W. THORNILEY, OF NEW BRIGHTON, PENNSYLVANIA.

Letters Patent No. 112,986 dated March 21, 1871.

IMPROVEMENT IN FIRE-PLACE GRATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES W. THORNILEY, of New Brighton, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Grates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in constructing grates for fire-places, so that the ends of the grate will stand off from the side jambs of the fire-place and hold the grate free from the back wall, as hereinafter described.

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

In the accompanying drawing, which forms part of my specification—

Figure 1 is a front elevation of an ordinary fire-place provided with my improvement in grates.

Figure 2 is a vertical section of the same.

Figure 3 is a perspective view of the grate.

Figure 4 is a side view of the end of the grate.

The main feature of my invention consists in providing the ends C of the grate with the flange D and

stay or brace *g*. By means of this flange D and brace *g* the ends C can be secured firmly to the jambs of the fire-place and at the same time hold the ends C off from the jambs, so that a free circulation of air will be had around the entire grate, and thereby prevent it from throwing dust out into the room provided with the grate.

The inner side of the ends C are provided with projections *f* and *e*, having recesses, into which are fitted the projections *h* and *i* of the bars *k* and *l*.

The position of the grate B in the ends C, and the arrangement of the ends and grate in the fire-place A, are clearly shown in figs. 1 and 2.

Having thus described the nature and construction of my improvement,

What I claim as of my invention is—

The end C, provided with the flange D, brace *g*, and projections *h* and *i*, in combination with the grate B, for the purpose of holding the grate off from the jambs and back walls of the fire-place, as herein described.

J. W. THORNILEY.

Witnesses:

A. C. JOHNSTON,
JAMES J. JOHNSTON.