

T. M. NEFF.
GRATE FOR FIRE-PLACE.

No. 172,576.

Patented Jan. 25, 1876.

Fig. 1.

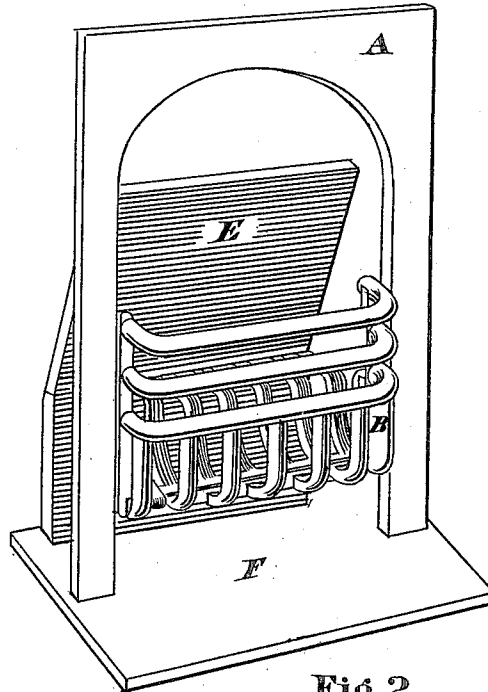
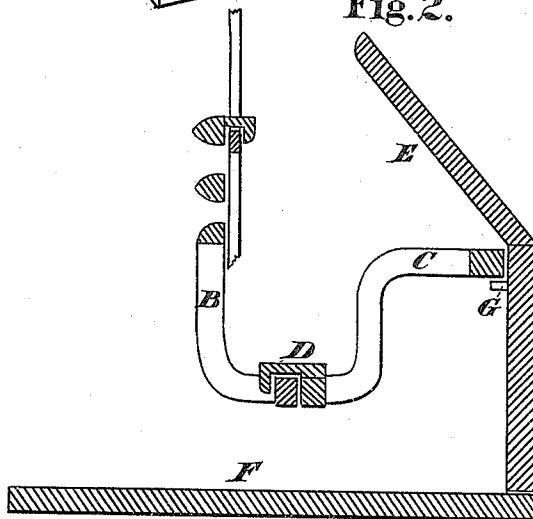


Fig. 2.



WITNESSES.

Frank Pardau.
C. Herwith

INVENTOR.

Theodore M. Neff
by J. G. Herwith
attorney.

UNITED STATES PATENT OFFICE.

THEODORE M. NEFF, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN GRATES FOR FIRE-PLACES.

Specification forming part of Letters Patent No. **172,576**, dated January 25, 1876; application filed November 8, 1875.

To all whom it may concern:

Be it known that I, THEODORE M. NEFF, of the city of Louisville, in the county of Jefferson and State of Kentucky, have invented a certain new and useful Improvement in Fire-Grates; 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, in which—

Figure 1 is a perspective view, showing the general construction of the grate. Fig. 2 is a sectional view of the grate, showing the turn in the bars of the back.

Similar letters of reference indicate corresponding parts of the drawing.

This my invention relates to fire-grates, but more especially to the peculiar construction of the grate forming the back and bottom, which grate is made to turn back against the tile, immediately on a level with the first cross-bar of the front grate; the object of which is to provide a grate that will be cheaper, more durable, and require less fuel to fill it, and, at the same time, cause a more perfect combustion of the fuel at the back, by means of which a greater amount of heat is thrown out by radiation than is possible to be done with the same amount of fuel where the straight or basket-shaped back-bars are used, particularly when made to extend as high up as the top of the front grate, and thereby permit the air to pass up behind it over the fuel, instead of through it, which is generally the case with the ordinary grates now in common use.

This my invention will be more fully illustrated in detail, in perspective view, Fig. 1, and sectional view, Fig. 2, of the drawing, in

which A is the front or frame of the grate, which may be made in any of the known forms. B is the front part of the grate, which is also made similar to the ordinary grates now in use. C is the grate forming the back and bottom, all of which is made in form as shown in the drawings. This part of the grate is so made as to form the lower part of the bottom and back as high up as the top of the first bar of the front, where it is made to turn back at right angles against the tile, forming a kind of platform or second bottom for the fuel to rest on, the object of which is to reduce the fuel-space at the bottom without reducing its radiating-surface at the top or in front, and also to produce a more perfect combustion of the coal, causing the tile to become thoroughly heated at that point, by means of air passing up through the fuel instead of behind or over it. D D are the hooks by which it is hung to the front. E is the tile in the back. F is the hearth, and G is the pin on which the back part of the grate rests.

Having thus fully described the nature and object of this my invention, therefore I do not claim anything as new in the front grate or frame; but

What I do claim as new, and desire to secure by Letters Patent, is—

A grate provided with a back, C, the upper portion of which extends back horizontally, or at right angles to the lower portion, and on a line with the lowest horizontal or cross bar of the front of the grate, substantially as and for the purpose described.

THEODORE M. NEFF.

Witnesses:

FRANK PARDON,
C. HEWITT.