

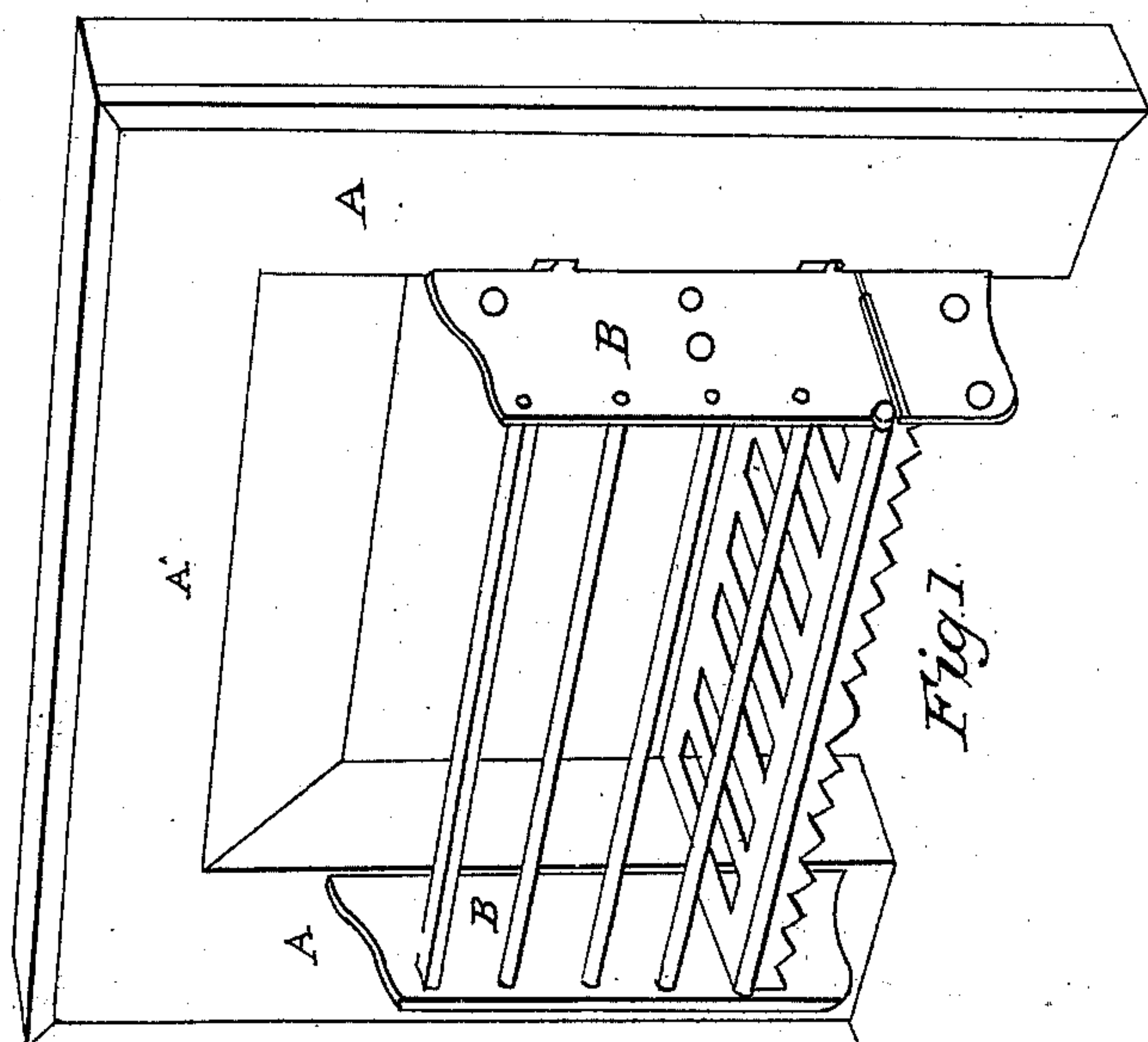
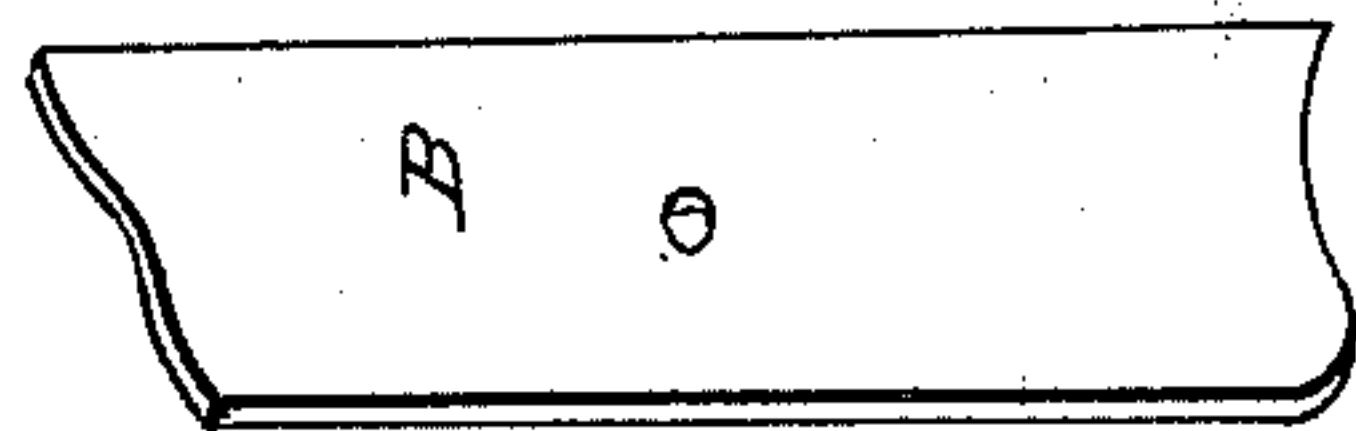
J. EASTERLY.

Grate.

No. 2,627.

Patented May 16, 1842.

*Fig 2.*



*Fig 1.*

# UNITED STATES PATENT OFFICE.

JAMES EASTERLY, OF TROY, NEW YORK.

## OPEN GRATE.

Specification of Letters Patent No. 2,627, dated May 16, 1842.

*To all whom it may concern:*

Be it known that I, JAS. EASTERLY, of the city of Troy, in the county of Rensselaer and State of New York, have made certain Improvements in the Manner of Constructing the Bodies of Grates for Open Fireplaces; and I do hereby declare that the following is a full and exact description thereof.

My improvement consists in the manner in which I construct the ends, or sides, of the projecting portion of the grate, which part, as they are usually constructed, consists of a continuation of the front bars curved round, and left open laterally. In my plan, the ends of the grate consist of a continuous double plate of metal, which may project out at right angles from the jambs to the distance required for the depth of the fire chamber. The front grate bars in my grate, extend along in a straight line from one of these projecting sides to the other, but they may be curved, if preferred. These side, or end, plates I make double, so as to allow of a flue of air between them. The outermost of these double plates may then be covered with a suitable coat of varnish, or other blacking, which will be protected from injury by the fire by the nonconducting property of the stratum of air between the two plates; the jambs of the fireplace and the wood work in their vicinity, will also be thereby effectually preserved from injury by the heat.

In the accompanying drawing A, A, A', are the jambs of a fire-place which may be constructed either of cast or of sheet iron, and do not differ from others which have been long known and used.

B, B, are the sides of the projecting part of the grate, which rise at right angles from the jambs A, A. The innermost of the two plates composing each of the sides may be

roughly finished, and receive the ends of the front grate bars, which are to be riveted through them. These inner, or rough, end plates are to be covered by an exterior plate shown in Fig. 2, which may be attached to the interior plate by a screw, or otherwise. This exterior plate may be made ornamental in any of the modes adopted for ornamenting plates of cast or of sheet iron; they may be perforated with ornamental open work, if desired. There is to be a space of a fourth of an inch, more or less, between the two plates. I usually attach the grate to the jambs by means of hooks upon the inner edges of the end plates B, B, which are received into suitable mortises, or slots, in the jamb plates, thus admitting of the ready removal and replacing of the grate, in a manner known to makers of that article.

Besides the advantage, above named, of preventing injury to the varnish, or blacking, of the jambs, and to the wood-work in their vicinity, the ashes and coal are prevented from falling out laterally, and the draft is greatly improved by causing the whole of the air to pass through the fuel, in front of, and under the fire.

Having thus, fully described the nature of my improvement in those grates which project out from the jambs in open fireplaces, what I claim therein as new, and desire to secure by Letters Patent, is—

The making the projecting ends, or sides, of the body of such grates of plates of metal by which the said ends are closed, and air is admitted at the front of, and under, the fire only, in the manner, and for the purpose, herein set forth.

JAMES EASTERLY.

Witnesses:

HENRY PHILLIPS,  
WM. CASS.