

(No Model.)

W. H. GRAHAM.

DEVICE FOR ARRESTING DUST FROM ASHES.

No. 281,867.

Patented July 24, 1883.

Fig. 1.

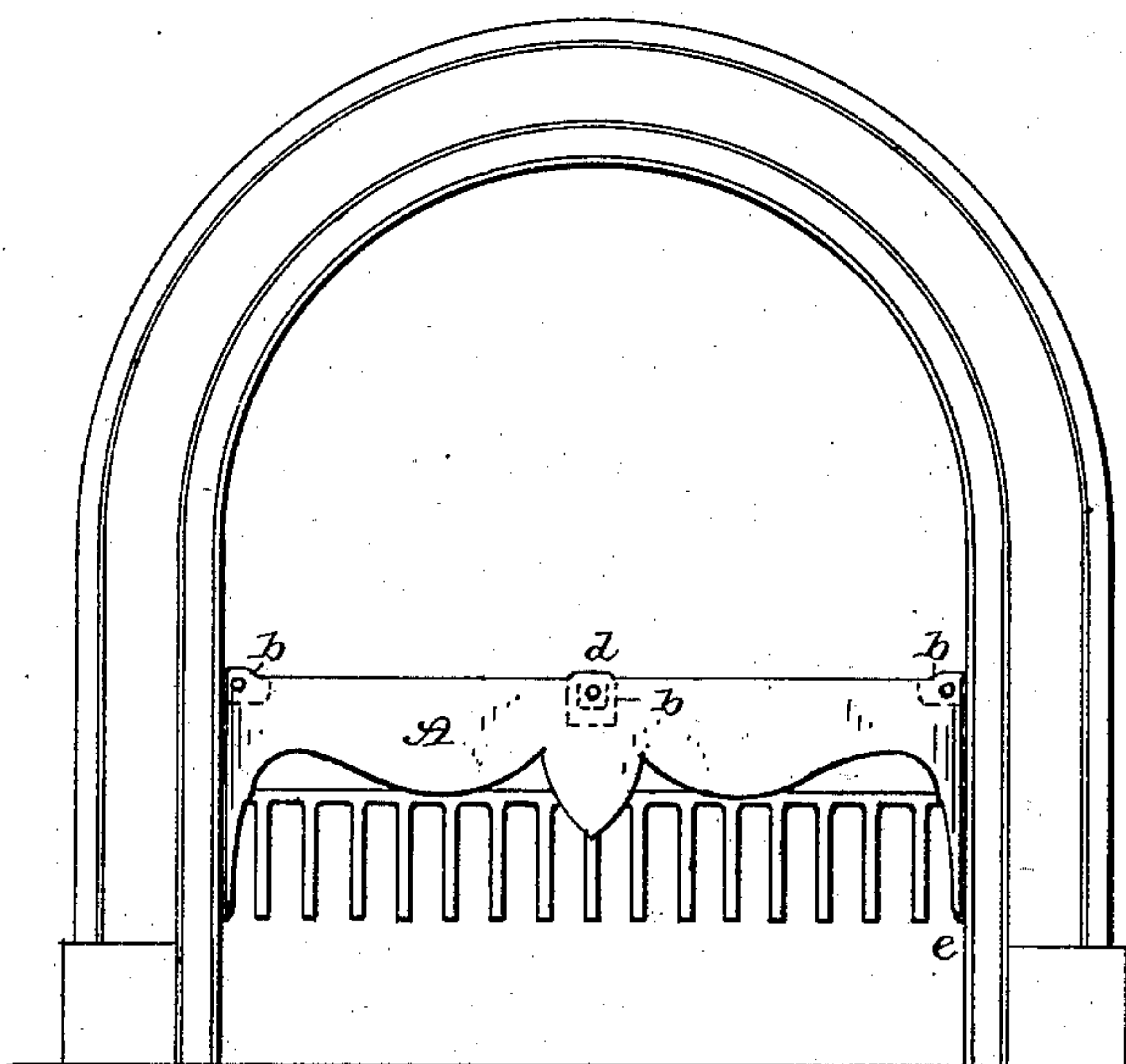
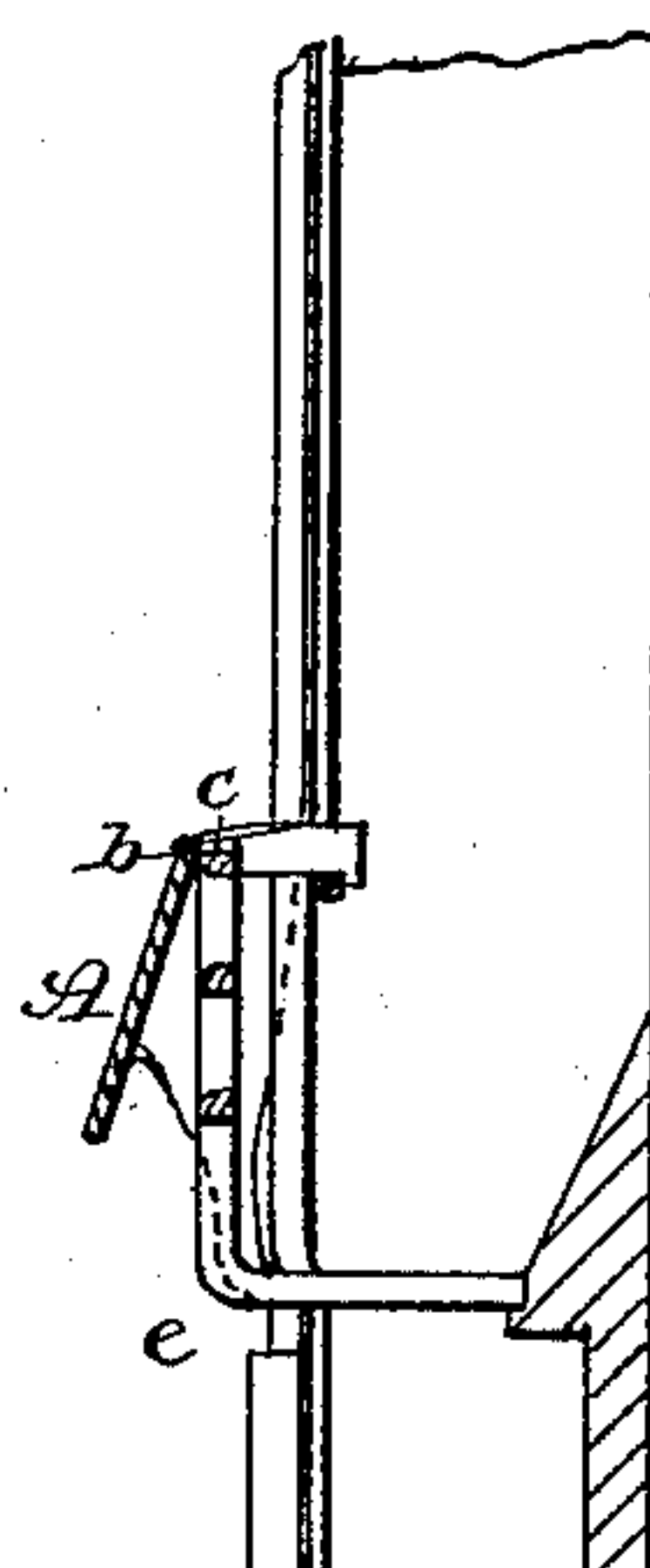


Fig. 2.



— WITNESSES. —

Louis F. Gardner

J. W. Garner

— INVENTOR —

W. H. Graham,

per

F. A. Lehmann,

Atty

UNITED STATES PATENT OFFICE.

WILLIAM H. GRAHAM, OF PITTSBURG, PENNSYLVANIA.

DEVICE FOR ARRESTING DUST FROM ASHES.

SPECIFICATION forming part of Letters Patent No. 281,867, dated July 24, 1883.

Application filed May 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GRAHAM, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Arresting Dust from Ashes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in devices for arresting dust from ashes when the fire is stirred to let the ashes drop from the grate into the ash-pan; and it consists of a shield in front of the horizontal bars that extends down at both sides of the grate, as will be fully described hereinafter.

The fire-grates in common use project more or less into the rooms beyond the jambs of the chimney, and when the fire is stirred to let the ashes drop from the grate a large portion of the ashes reduced to a fine dust, instead of being drawn into the chimney and escape, rises upward and settles upon the mantel-piece, carpets, and furniture contained in the room. This not only causes a great deal of unpleasantness and unnecessary labor to the housekeeper, but it defaces the carpets and injures the furniture and other objects in the room. To prevent this I place a light metallic shield in front of the upper part of the grate, that entirely incloses the horizontal bars without touching them, and secure its ends between the bars of the grate and the jambs. Between the shield and the uppermost bar of the grate is left an open space, and the lower edge of the shield projects from the grate outwardly, making its face slanting to intercept any dust rising from the front, or from under the grate, and let it pass upward through the open space between the bars and the shield into the chimney. The retreating sides of the shield reach to or below the bottom of the grate, to prevent the dust or ashes from being blown sideways. The shield, when ornamented, adds to the good appearance of the grate and causes much of the heat of the fire to be thrown downward, much of which would otherwise be drawn into the chimney without benefit-

ing the persons in the room. The width and form of the shield are such as not to be in the way, and it may be permanently attached to the grate or made removable.

The accompanying drawings represent my invention.

Figure 1 is a front elevation. Fig. 2 is a vertical section.

A represents the shield, made of a light metallic plate, the upper edge of which is on a line with the uppermost bar of the grate, and follows its form at both sides to the jambs, where the ends are fastened in any suitable manner. At the inside, near the upper edge of the shield, are blocks *b*, to prevent a close approach to the front of the bars, causing an open space, *c*, to be left between, and at the middle is a clasp, *d*, reaching over the top bar for a support. The ends *e* of the shield A extend downward to a line with the bottom of the grate, to prevent a side draft from blowing away the dust, or may be made longer to rest upon the ground. The face of the shield stands at an angle of about thirty degrees with the bars, creating an open space between its lower edge and the grate sufficiently wide to arrest the dust arising from the fire when stirred to clear it from ashes, and causing it to be carried by the draft upward through the narrower opening *e*, between the top bar of the grate and the upper edge of the shield. The width of the shield should not extend below the horizontal bars of the grate, but its lower edge may be straight or ornamented, as shown.

Having thus described my invention, I claim—

A dust-arrester, as described, consisting of a shield placed in front and around the horizontal bars of a fire-grate, with an open space between the shield and the bars that increases in width from the top downward.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. GRAHAM.

Witnesses:

LOUIS MOESER,
I. E. HIRSCH.