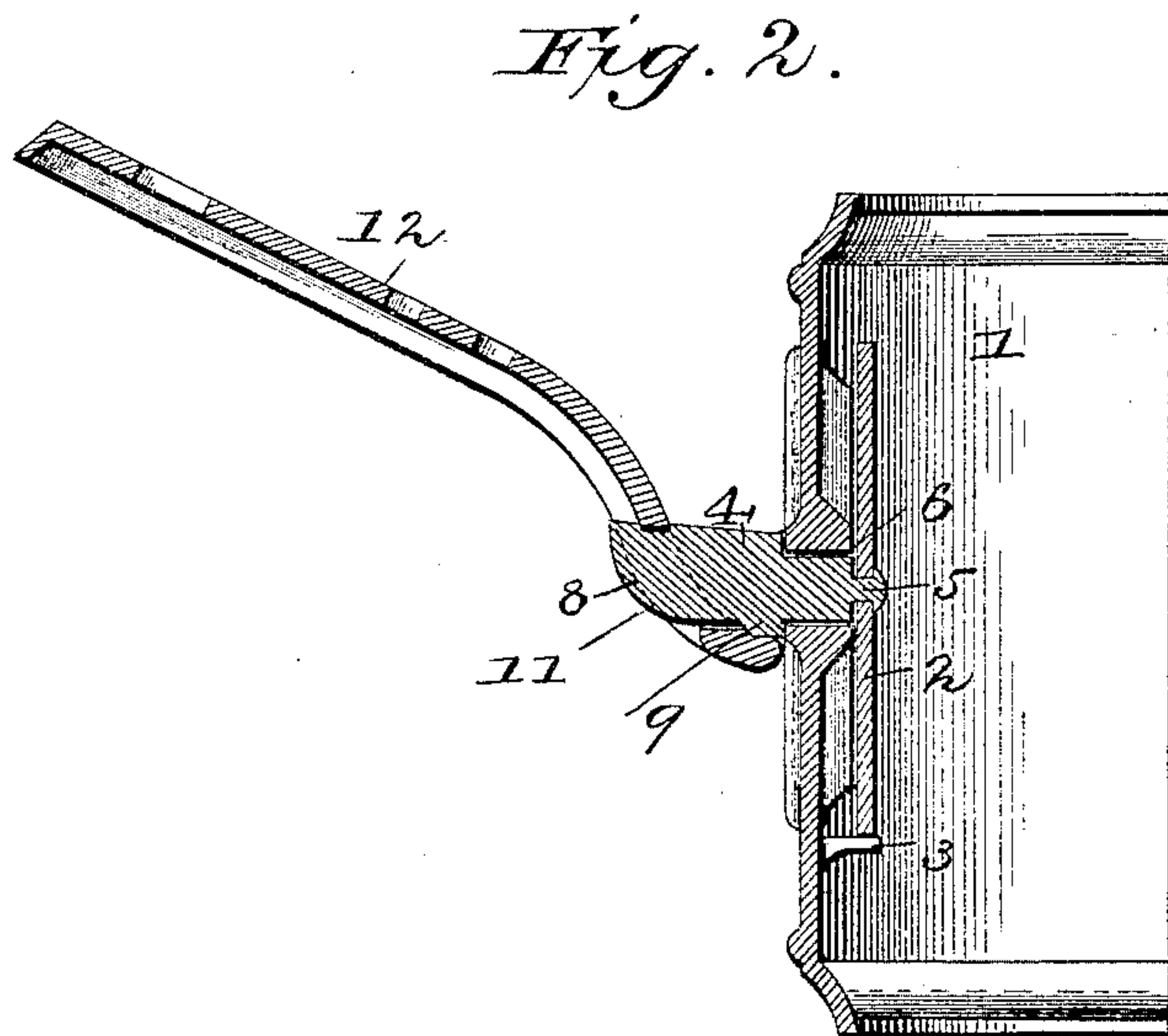
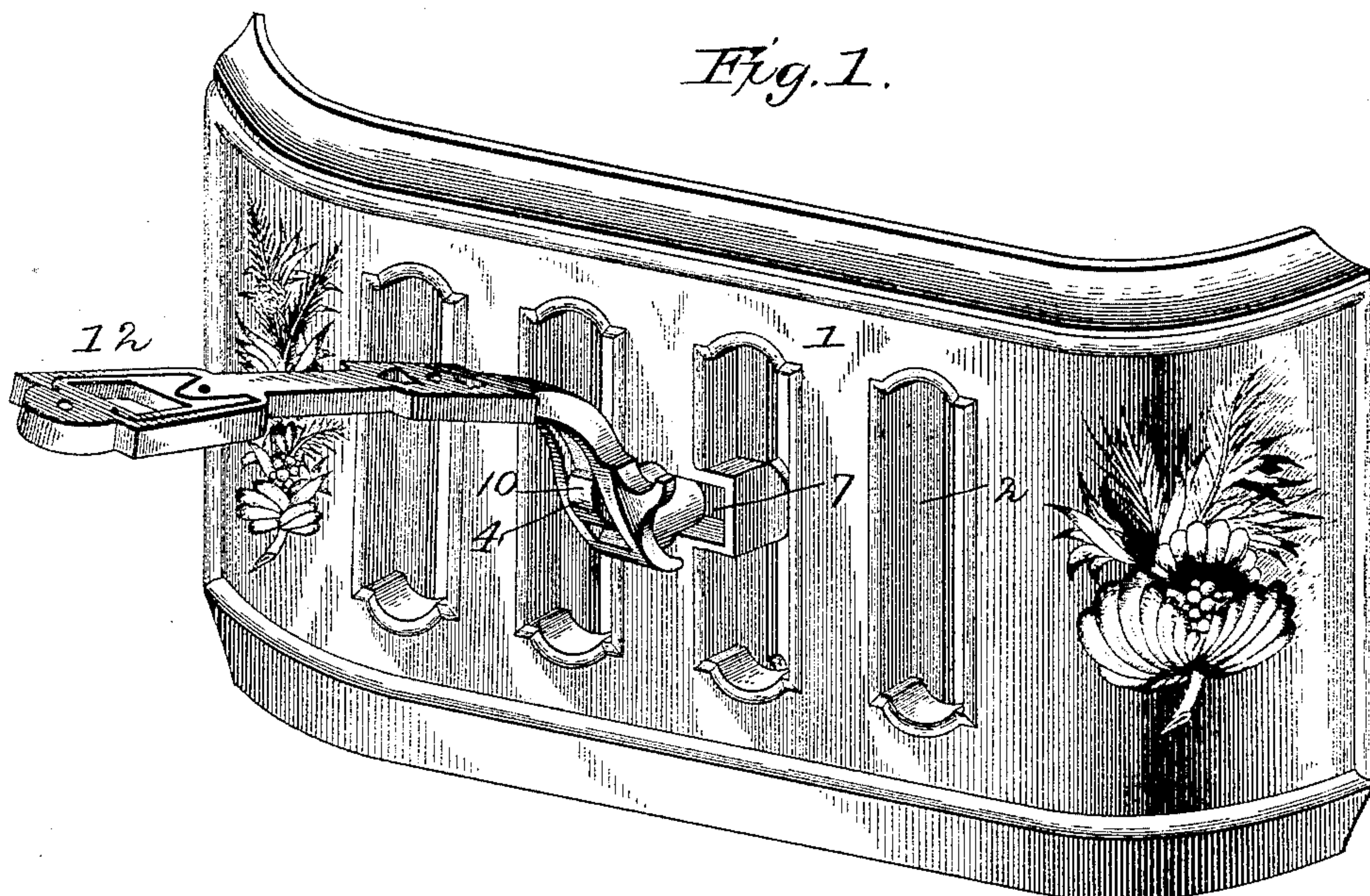


(No Model.)

J. D. FOSTER.
GRATE BLOWER.

No. 454,468.

Patented June 23, 1891.



WITNESSES
F. L. Curand
Jno. Enders Jr.

INVENTOR
James D. Foster.
per *Benj. E. Cowd.*
Attorney

UNITED STATES PATENT OFFICE.

JAMES D. FOSTER, OF IRONTON, OHIO.

GRATE-BLOWER.

SPECIFICATION forming part of Letters Patent No. 454,468, dated June 23, 1891.

Application filed February 4, 1891. Serial No. 380,186. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. FOSTER, a citizen of the United States, residing at Ironton, in the county of Lawrence and State of Ohio, have invented certain new and useful Improvements in Grate-Blowers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in grate-blowers, and more particularly to a new and novel manner of constructing the ventilator-slide button, whereby the adjusting of the slide and the removal of the blower from the grate may be accomplished without noise or danger of burning the hand of the attendant.

Heretofore it has been customary to provide the ventilator-slide of a grate-blower with a button or projection which extends through a slot in the blower and by means of which the said slide is opened or closed, as desired. It has also been customary to provide the blower with a hand-piece independent of the ventilator-slide to assist in removing or replacing the blower, and in some cases the ventilator-slide button is dispensed with and the hand-piece is secured directly to the ventilator-slide, whereby the slide may be operated and the blower removed by one and the same mechanism.

While the above constructions serve the respective purposes for which they are designed, yet they fail to overcome two very great objections which have frequently been experienced by those having the care of grates—open-front or "Franklin" stoves—which objections are, first, the noise caused by striking the ventilator-slide button with a poker or a grate-lifter in order to open or close the ventilator-slide. This is rendered necessary for two reasons, the first being that the button is too hot to be touched by the naked hand, and the second reason is that the ventilator-slide frequently becomes wedged from rust or from an accumulation of ashes between it and the blower. The noise occasioned by this procedure is always more

or less disagreeable and in some instances positively dangerous, as in the case when the grate is located in a sick-room, where perfect quiet is required. The second objection to the constructions first mentioned is the trouble and danger always attending the removal of a blower by the hand-piece, as a cloth or other suitable non-conductor of heat has to be employed for the purpose, and even then the attendant runs the risk of being burned by letting his hand contact with the blower.

It is the object of this invention to overcome these obstacles by providing a blower in which the ventilator-slide may be operated or the blower removed without noise or danger of burning the hand of the attendant.

With these objects in view the invention consists, broadly, in the combination, with a blower and its ventilator-slide, of a projection secured to the said slide and extending through and beyond the blower and constructed to be engaged by a grate poker or shaker, whereby the ventilator-slide may be operated and the blower removed without noise or danger of burning the hand of the attendant.

The invention further consists in the various novel details of construction, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming part of this specification, and in which like numerals of reference indicate corresponding parts, I have illustrated one form of grate-blower provided with my improvement, although the same may be applied to other forms of blowers without in the least departing from the spirit thereof, and in these drawings—

Figure 1 is a perspective view of the grate-blower, showing the ventilator-slide partly open and a grate-poker in engagement with a projection or button on the slide; and Fig. 2 is a vertical sectional view showing more particularly the construction of the projection.

Referring to the drawings, 1 designates the grate-blower, and 2 the ventilator-slide, which parts may be of any approved construction and ornamented in any manner to produce a neat and finished appearance, the back of said blower being provided with a series of

projections 3, which form guides both to support and cause the ventilator-slide to move in a horizontal line.

4 designates a projection, the inner end of which is reduced, as shown at 5, which part is inserted through an opening in the ventilator-slide and is upset or riveted, so as to hold it rigid therein. The metal in front of the reduced portion forms a square shoulder 6, which works in a transverse slot 7, formed in the blower, this construction, together with the guides referred to, effectually preventing the ventilator-slide from dropping from a horizontal plane. The front portion 8 of the projection is enlarged, as shown at 9, and the outer end is again reduced, as shown at 10, thus forming shoulders 11, designed to be engaged by the walls surrounding the opening in the poker or shaker, so as to prevent the blower turning when being lifted from the grate. The poker or shaker 12, to which reference has been made, may be of any approved construction.

From the foregoing description the operation of the device will be apparent. When it is desired to close the ventilator-slide, the poker is placed in the position shown in the drawings, thus giving the operator sufficient

leverage to open or close the same without the necessity of resorting to the means referred to in the first part of the specification, and when the blower is to be removed or replaced the poker is used for this purpose, thus rendering it unnecessary for the operator to touch the blower. It will thus be seen that all danger of burning the attendant or of making unnecessary noise is effectually overcome.

Having thus fully described my invention, what I claim as new, and desired to secure by Letters Patent, is—

The combination, with a blower and its ventilator-slide, of a projection secured to the said slide and extending through and beyond the blower and constructed to be engaged by a grate-shaker or stove implement, whereby the slide may be operated and the blower removed without noise or danger of burning the hand of the attendant.

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

JAMES D. FOSTER.

Witnesses:

LOT DAVIS,
FRED A. ROSS.