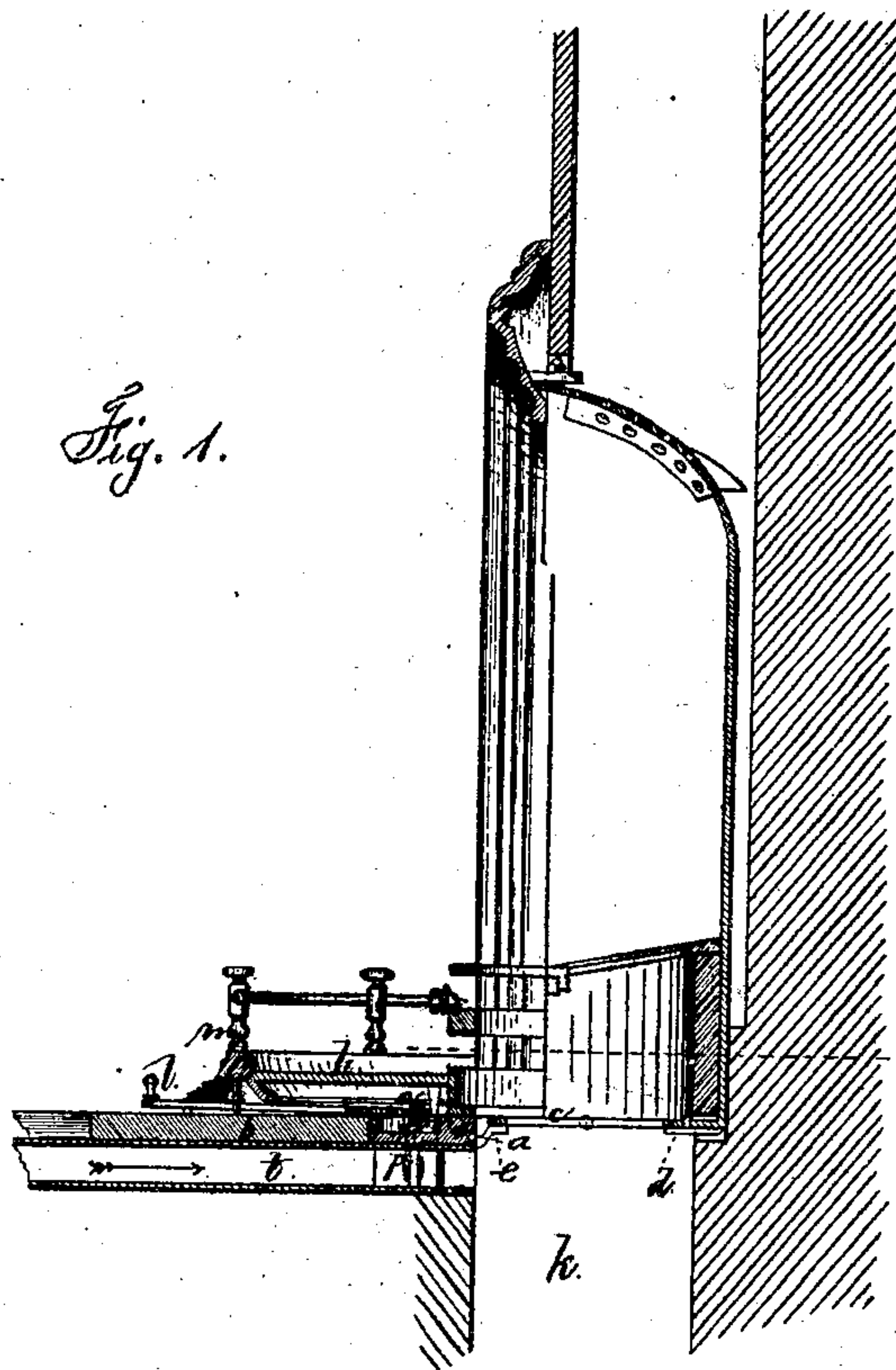


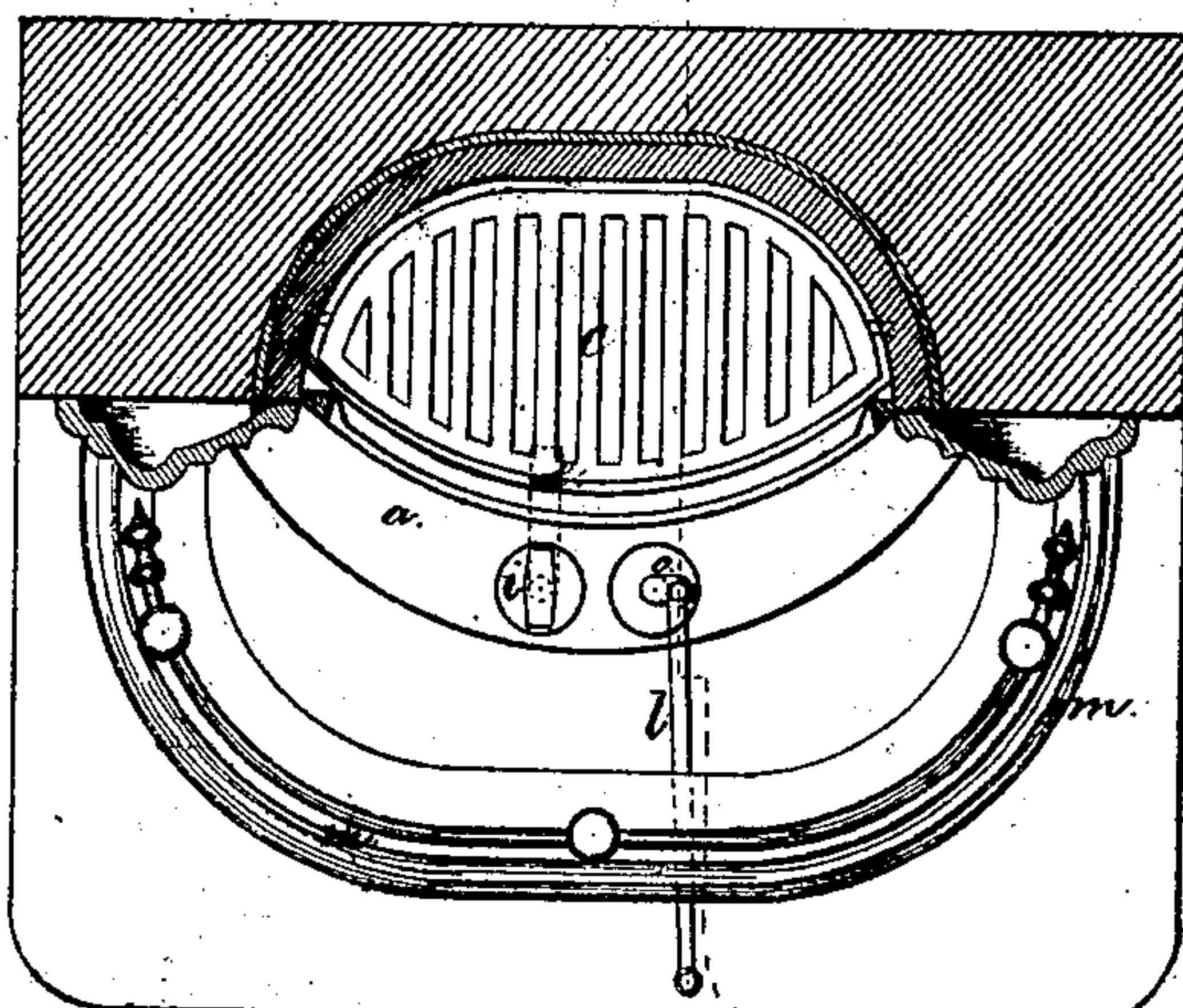
No. 105,297.

PATENTED JULY 12, 1870.

S. S. BENT.  
FIREPLACE GRATE.



*Fig. 2.*



Witnesses,

*Chas. H. Smith*  
*Geo. A. Warner*

Inventor,

*Samuel S. Bent*

# United States Patent Office.

SAMUEL S. BENT, OF PORT CHESTER, NEW YORK.

Letters Patent No. 105,297, dated July 12, 1870.

## FIRE-PLACE GRATE.

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, SAMUEL S. BENT, of Port Chester, in the county of Westchester and State of New York, have invented and made an Improvement in Grates, and the following is declared to be a full, clear, and exact description of the said invention.

Grates have heretofore been set upon the level of the hearth over a pit in the chimney, into which the ashes pass when the fire is stirred, and the air to the grate has been admitted by a pipe below the floor, with a damper operated by a button in a socket let into the floor outside the hearth.

This form of grate is objectionable because the button and socket are unsightly in the floor; the carpet has to be cut, and difficulty arises in getting the damper to operate properly.

Furthermore, these grates are stationary, and the coal and clinkers have to be taken off the same in a shovel or by hand.

In my invention I fit the damper in or below the frame that carries the grate, and operate the same by an arm or a rod running under the fender apron, and I provide in the said frame a button and finger for supporting the grate, so that the contents of the grate can be dumped into the pit by turning aside said finger and tipping the grate, thereby facilitating the emptying of the grate, and rendering it unnecessary to gather up the cinders or clinkers, thus preventing dust or dirt in the room.

In the drawing—

Figure 1 is a vertical section of the said grate at *xx*; and

Figure 2 is a sectional plan of the same, with the fender-apron removed.

The grate-frame *a* is let in flush with the hearth *b*, and supports the grate *c*, said grate having projecting studs or trunnions upon which it swings, and resting at the back upon a finger, *d*, and at the front a turning finger, *e*, is provided, the same being operated by a button, *i*, that is in a recess in the frame *a*.

This frame *a* is also made sufficiently wide to re-

ceive the button or arm *o* of the damper *p*, and this damper *p* is in a pipe or opening, *t*, formed below the frame *a*, and as a part of the same, or in the brick-work surrounding the pit *k*; and by adjusting this damper the admission of air to the fire is regulated.

The rod *l*, connected to the crank *o* and passing out to the front of the fender *m*, furnishes a convenient means for moving this damper.

It is to be understood that, by lifting off the apron *h*, access is given to the button *i*, for turning the same, and dumping the grate.

The hearth and frame *a* being flush, or nearly so, any ashes can be swept off the hearth into the pit below the grate, and any dust upon the fender can be disposed of in the same manner, thus preventing the dust and dirt usual in a room where the grate is emptied for building a fire.

This improvement is available upon the first or basement floor, where the pit can be built below the grate in the cellar.

In upper rooms this improvement cannot be employed unless a special pit is provided, running down to the cellar.

The rod *l* is a convenient means for operating the damper *p*, but the said damper may be moved by an arm of any desired kind, and the apron of the fender may be lifted to give access to the arm or damper.

I claim as my invention—

1. The grate-frame *a*, made to sit flush, or nearly so, with the hearth, and support the swinging grate, in combination with the supporting finger *e* and pit *k*, as and for the purposes set forth.

2. The damper *p*, beneath the grate-frame *a*, and operated by an arm or rod above said frame and beneath the fender, combined with the air-inlet pipe *t*, and pit *k*, as and for the purposes set forth.

Dated this 16th day of May, A. D. 1870.

SAMUEL S. BENT.

Witnesses:

LEMUEL W. SERRELL,  
GEO. T. PINCKNEY.