

No. 667,692.

Patented Feb. 12, 1901.

H. E. FINE.
STOVE DOOR SCREEN.
(Application filed Aug. 3, 1900.)

(No Model.)

Fig. 1.

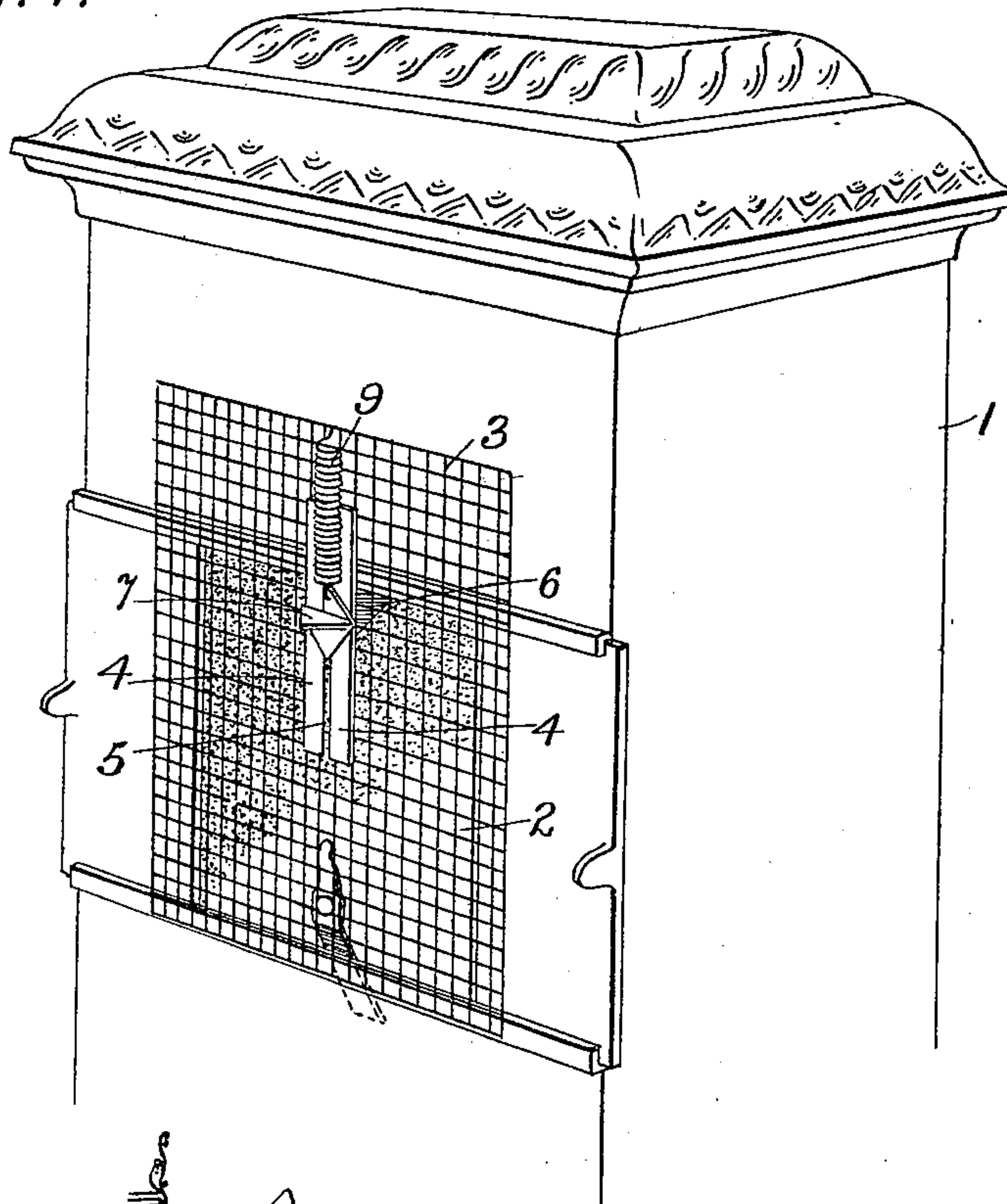


Fig. 2.

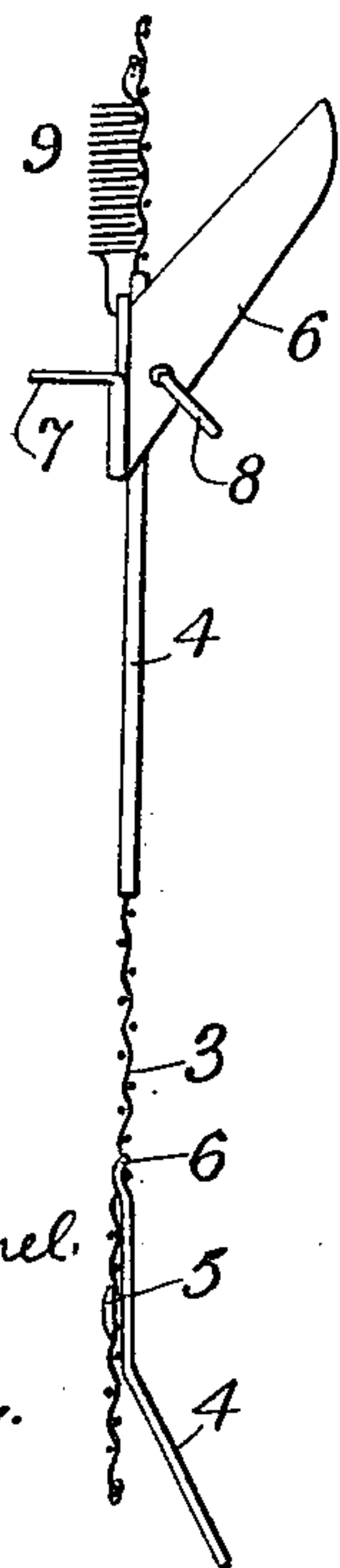
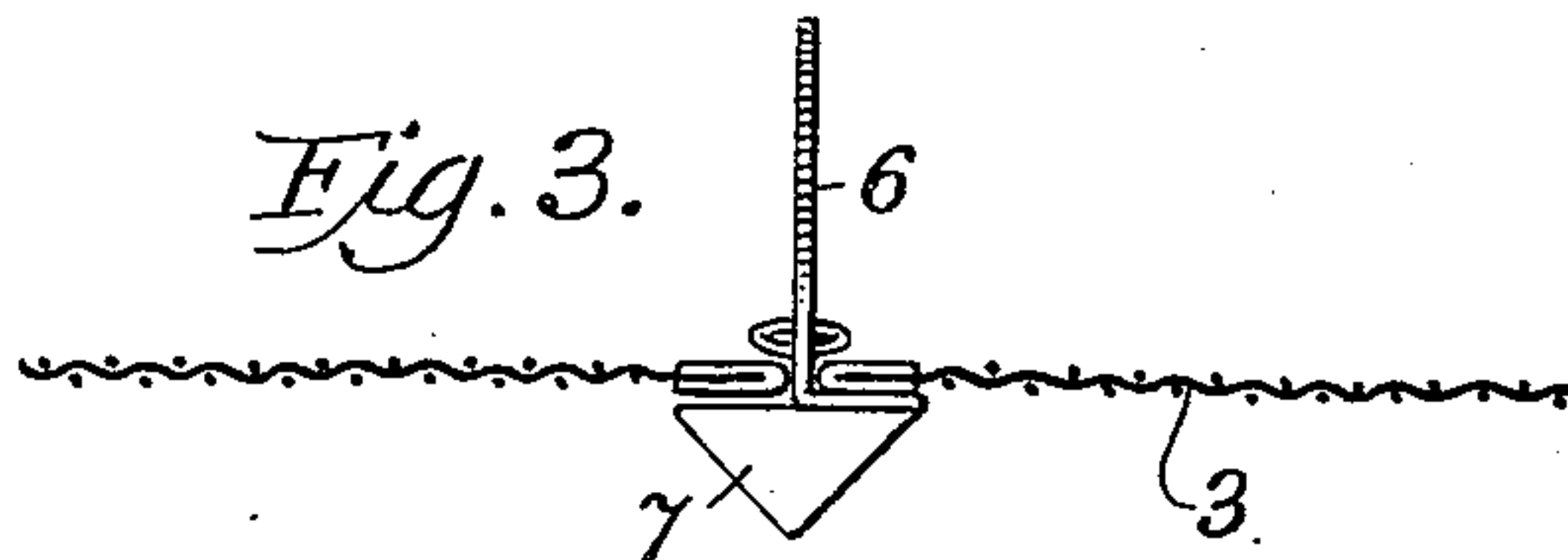


Fig. 3.



WITNESSES:

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HORACE E. FINE, OF TRENTON, NEW JERSEY.

STOVE-DOOR SCREEN.

SPECIFICATION forming part of Letters Patent No. 667,692, dated February 12, 1901.

Application filed August 3, 1900. Serial No. 25,733. (No model.)

To all whom it may concern:

Be it known that I, HORACE E. FINE, a citizen of the United States of America, and a resident of Trenton, county of Mercer, State of New Jersey, have invented certain new and useful Improvements in Stove-Door Screens, of which the following is a specification.

My present invention has reference to an improvement in stove-door screens, the object being to provide a simple and convenient as well as economical screen adapted to be placed over an open stove-door to prevent fragments of burning coal or other fuel from snapping or flying out of the door and coming in contact with some combustible material, thereby causing a fire, an occurrence which often results when a fire is arranged to keep over night or when for a length of time the door is left open, so that without some protection of the kind now provided by me hot pieces of fuel are apt to fly out of the door and cause a conflagration; and the invention consequently consists in the construction, arrangement, and combination of the various parts substantially as will be hereinafter more fully set forth and then pointed out in the appended claims.

Figure 1 is a perspective view of a stove or heater provided with my improved stove-door screen, the latter being shown in its operative position. Fig. 2 is a sectional edge view of the same. Fig. 3 is a top plan view.

Like numerals of reference designate corresponding parts throughout the different figures.

1 designates a stove, range, or heater of any desired type or kind having on one side thereof a door 2. It must be understood, however, that this stove is presented here simply by way of example in order to illustrate the practical application of my invention, and I am not to be restricted to this form of heating device, inasmuch as the invention is equally applicable to all kinds of stoves, ranges, or heaters having doors or openings through which access is had to the fire.

3 denotes a screen of wire-cloth, perforated sheet metal, or some similar meshed material, the same being bent and fitted to any desired curve or shape, and this sheet of wire-cloth is designed to cover the door-opening in the

stove when the door is open, and thus serve as a shield or guard to prevent any pieces of burning material within the stove from flying off the fire out into the room through the door-opening.

In order to fasten screen 3 in position over the opening 2, I provide it with a footpiece 4, which is attached thereto near the lower edge on the side next to the stove, said foot-piece 4 consisting simply of a downwardly-projecting inclined finger having a rivet 5, which is fastened to the screen 3 by passing through one of the meshes thereof, and having a bent upper end 6, which engages the screen, as is clearly shown in Fig. 2. By means of this footpiece 4, therefore, which engages the bottom edge of the stove-door opening, the lower part of the screen 3 is held in its vertical position. In order to fasten the upper part of the screen 3, I provide a latch 6, which slides vertically in the parallel guide-strips 4 4, that are secured to the screen 3, at the middle portion thereof, in such a manner as to leave the intervening slot 5, in which the latch 6 has its movement. Latch 6 projects in an inclined position behind the screen 3, and it is formed with a horizontal thumb-piece 7, located on the front face of the screen 3. A ring 8 or other similar device is attached to the latch 6 behind the screen 3 for the purpose of keeping the latch device in position in the slot 5. It will be noted that latch 6 and thumb-piece 7 are made out of a single piece of material suitably bent to provide a device capable of sliding vertically within the slot, and at the same time furnishing the flat thumb-piece and the diagonal latch-bar. A spiral spring 9 is attached to the latch-piece at a point above the thumb portion 7 and also at its opposite end is fastened to the upper edge, or thereabout, of the screen 3, the object of this spring being to normally hold the latch in its uppermost position, below which position it can be depressed when desired by applying pressure to the thumb-piece 7, and when such pressure is released the latch will rapidly be restored to its former position. Thus it will be noted that this latch 6 is designed to engage the upper edge of the stove-door opening 2, and it is shown in this position of engagement in Fig. 1. In

order to disengage it, the user simply needs to draw the latch downwardly by pressing upon the thumb-piece 7.

The method of applying the screen to its position will be readily understood from the foregoing description of the construction and arrangement of the parts. Screen 3 will simply be taken in the hand and placed in proper position over the door-opening 2, with the footpiece 4 engaging the lower edge of the door-opening, and then by drawing the latch 6 downwardly and engaging it with the upper edge of the opening 2 and then releasing the thumb-piece 7, allowing the latch to move upwardly into full engagement with the upper edge of said opening 2, the screen will be effectively placed for actual service in preventing flying pieces of coal from passing downwardly through the opening 2. It will be observed, moreover, that when the screen is in this position it will strike all around the door-frame against the surface of the stove, so that the opening 2 will be effectually covered. No matter what may be the shape of the opening 2 or the configuration of the frame or the size and structure of the external surface of the body of the stove the screen may be placed in position and made to serve with equal effectiveness.

The footpiece may be formed, if desired, by bending a part of the screen, and when of the form shown in the drawings the rivet may be dispensed with.

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

1. In a stove-door screen, the combination with a meshed or perforated sheet, of a foot-piece consisting of a downwardly-projecting finger on the screen near the lower edge thereof, adapted to engage the bottom edge of the

stove-door opening, a latch arranged to slide vertically in a slot in the screen and having a thumb-piece on the front face of the screen and a diagonal latch on the rear of the screen, said latch being designed to engage the upper edge of the stove-door opening, and a spring attached to the latch-piece and also to the screen having for its object the holding of the latch in its uppermost position in engagement with the edge of the stove-door opening, substantially as and for the purpose set forth.

2. In a stove-door screen, the combination with a meshed or perforated screen, of a foot-piece riveted to the screen near the lower edge thereof and adapted to engage the bottom edge of the stove-door opening, parallel guide-strips secured to the screen in such a manner as to leave an intervening slot between them, a vertically-movable latch device in said slot, the same having a thumb-piece on the front of the screen and a latch at the rear thereof, said latch being designed to engage the upper edge of the stove-door opening, and a spring for keeping the latch in said engagement while the screen is in its service position, substantially as described.

3. In a stove-door screen, the combination with a meshed fabric of metal, or similar material, having a vertical slot therein, of a latch adapted to play in said slot and having an inclined latch-piece and a projecting thumb-piece, a spring for normally drawing said latch-piece to its upper position, and an inclined footpiece for engaging the lower edge of the door-opening.

Signed at Trenton, New Jersey, this 3d day of July, 1900.

HORACE E. FINE.

Witnesses:

J. E. KEELER,
E. H. GINNELLEY.