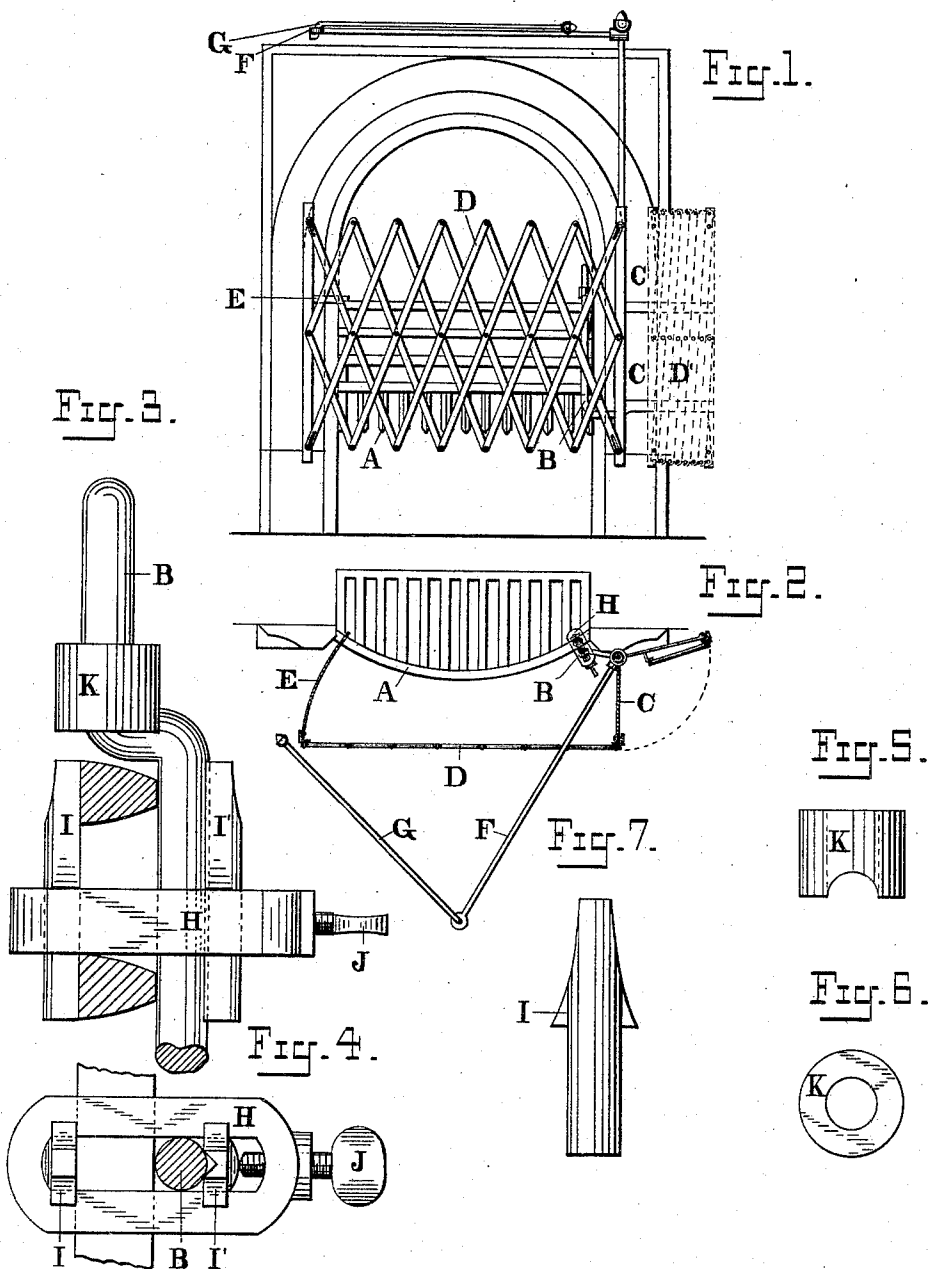


(No Model.)

J. J. MITCHELL.
FIRE GUARD FOR GRATES.

No. 474,562.

Patented May 10, 1892.



Witnesses
H. Alber
L. H. Hill

Inventor
John James Mitchell
By his Attorney P. Byrne

UNITED STATES PATENT OFFICE.

JOHN JAMES MITCHELL, OF AVONDALE, ALABAMA.

FIRE-GUARD FOR GRATES.

SPECIFICATION forming part of Letters Patent No. 474,562, dated May 10, 1892.

Application filed January 25, 1892. Serial No. 419,178. (No model.)

To all whom it may concern:

Be it known that I, JOHN JAMES MITCHELL, a citizen of the United States, residing at Avondale, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Fire-Guards for Grates; and I do hereby 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.

My invention consists in improvements in a fire-guard for grates, which can be attached to any grate and removed at will without difficulty; and the objects of my improvements are, first, to provide a cheap and effective guard to protect people from getting their clothes ignited by the fire in the grate; second, to provide a guard that when not needed or it is necessary to attend to the fire can be folded to one side out of the way and immediately drawn in front of the grate when necessary. By a simple contrivance I also provide a drying-rack, which can be placed in any position in front of the fire, on which articles can be hung to dry, and when not in use can be folded back out of the way. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical view of a grate with the fire-guard and drying-rack attached. Fig. 2 is a plan view of the grate, guard, and drying-rack. Fig. 3 is a vertical view of part of the U-shaped supporting-rod and the grate-bars in section with the clamp attached. Fig. 4 is a plan view of the clamp and keys. Fig. 5 is a vertical view of the collar for the supporting-rod. Fig. 6 is a plan view of the collar, and Fig. 7 is a view of the back of one of the clamp-keys.

Similar letters refer to similar parts throughout the several views.

In the drawings, A designates a grate of any of the usual forms of construction. B is a U-shaped supporting-rod made of brass, steel, or any metallic substance and bent to the shape shown in the drawings. The supporting-rod is clamped to the bars of the grate by the link-shaped clamp H, which permits it to swing to conform to the shape of the grate-front. The part of the rod that extends up the

grate-front forms a pintle for the hinges C C, on which the guard D can swing in any direction. On the back of the angle-iron, which forms the hanging-stile of the guard D, are also pintles that engage the hinges C C and on which they also freely swing and on which the guard can be folded back, as shown by the dotted lines D'. The guard D is made of brass or steel or any suitable metallic substance. The hanging-stiles are preferably made in the form of angles, to which are attached by rivets the strips which form the lattice or lazy-tongs, or the folding fire-guard, secured together by rivets, on which it freely works in all its parts, and when extended in front of the grate it is secured on its opposite end from the hinges to the grate-bar by the catch E, pivoted on the inside of the angle-iron.

The swinging arm pivoted on the top of the supporting-rod is designated by the letter F and can be turned freely on its pivot to swing out at any angle from the grate-front. On its outer end is formed an eye or loop in which the second arm G is inserted, having on its end a reverse bend, on which it also freely swings, and when both are swung out, as shown in the drawings, makes a handy drying-rack to hang articles to be dried in front of the grate. The clamp H, made in the form of a link, is inserted on the supporting-rod and placed between the bars of the grate, and when one of the keys I is placed through the link on the inside of the grate-bars and the key I' with the V-groove placed through the clamp on the outside of the supporting-rod by screwing upon the thumb-screw J all are securely clamped together. The supporting-rod can be placed in any required position before being clamped. The collar K, placed on the end of the supporting-rod above the grate-bars, is for the purpose of making a bearing for a shelf or any other device to be pivoted to that end of the rod.

My improved fire-guard and clothes-drier can be placed on any grate, as can be readily seen without much trouble by any person. The supporting-rod can be raised or lowered or placed in any position on the grate before the screw is tightened up to clamp it. The guard can be instantly extended across the

grate or folded away snugly at the side, as required, and the rods of the clothes-drier can be swung out so as to extend at any required distance from the grate or folded back out of the way, as required. The guard and appliances can be made as ornamental as desired and does not in any way interfere with persons sitting round the fire.

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

1. In a fire-guard for grates, the combination of the U-shaped supporting-rod with folding or extensible fire-guard connected to the said supporting-rod by hinges, one end of each of the said hinges turning on the supporting-rod and the other end of each of the hinges turning on pintles secured on one of the sides of the angle-iron, forming the hanging-stiles of the guard and having a hook on the opposite angle-iron from the hinges to engage the grate-bar, substantially as described.

2. In a fire-guard for grates, the combination of the supporting-rod with folding or extensible fire-guard having on the upper end of the supporting rod at right angles the rod F, on one end of which is an ornamental cast-

ing to form a pintle to swing freely on the end of the supporting-rod and on the other end is formed an eye or loop in which the second rod G, having on its end a reverse bend and being inserted in the eye aforesaid, forms a pintle, on which it also freely swings, said supporting-rod having on its end that is clamped against the grate-bars a collar with a hole in it to slip over the rod, and a recess on the under side to set on the bend of the rod, substantially as described.

3. In a fire-guard for grates, the combination of the supporting-rod with folding or extensible fire-guard having a link-shaped clamp securing the supporting-rod to the grate-bars, with a key on the inside of the bars and a key with a V-groove on the outside of the supporting-rod and all clamped together with a thumb-screw to secure the said supporting-rod to the grate-bars, substantially as described.

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

JOHN JAMES MITCHELL.

Witnesses:

CHAS. P. JONES,

JAS. C. SHIROD.