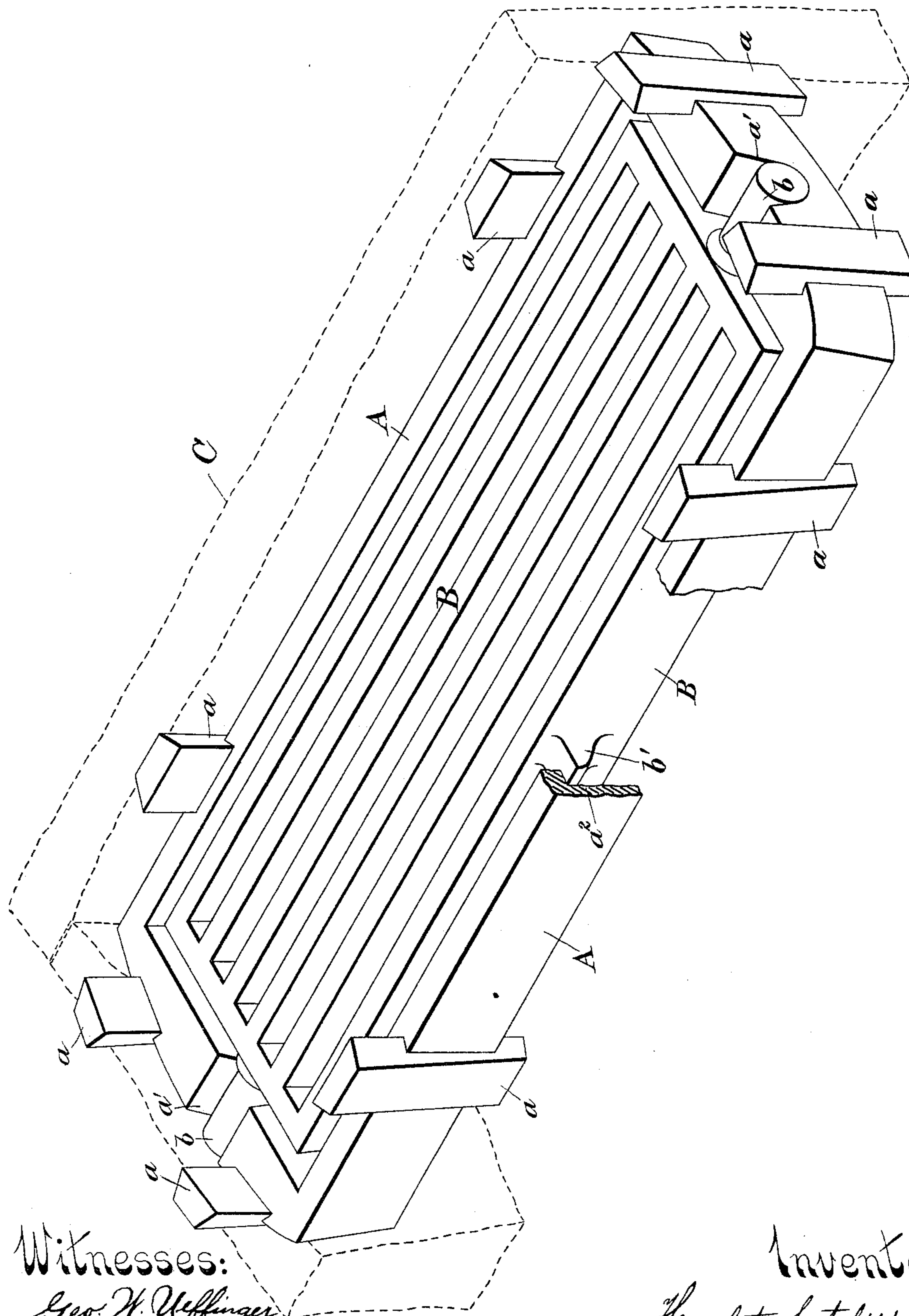


(No Model.)

H. SUTCLIFFE.
FIRE GRATE.

No. 406,009.

Patented June 25, 1889.



Witnesses:
Geo. W. Veffinger
Ed. Peterson

Inventor.
Hamlet Sutcliffe

UNITED STATES PATENT OFFICE.

HAMLET SUTCLIFFE, OF OAKLAND, CALIFORNIA.

FIRE-GRATE.

SPECIFICATION forming part of Letters Patent No. 406,009, dated June 25, 1889.

Application filed January 24, 1889. Serial No. 297,405. (No model.)

To all whom it may concern:

Be it known that I, HAMLET SUTCLIFFE, of Oakland, Alameda county, State of California, have invented an Improvement in Fire-Grates; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to fire-grates or fire-pot bottoms; and it consists, essentially, of an inclosing and supporting frame, a pivoted grate supported thereon, and means by which the inclosing and supporting frame is secured in the fire-pot.

The objects of my invention are, first, to provide a simple and efficient means whereby grate-bars may be secured at any desired height in a fire-box or be adapted to fit various sizes of fire-pots, and, second, to so construct it that ashes and other refuse of combustion may be dumped from the surface of the grate into the ash-pit below the grate, returning to its normal position by gravity. I accomplish these objects by means of the devices illustrated in the accompanying drawing, which is an isometrical view of my device, portions being broken away to more clearly illustrate it.

Referring to the accompanying drawing, A is an inclosing and supporting frame; *a*, wedge-shaped blocks let into frame A; *a'*, bearings for journals; *a*², recess for the reception of projection *b'*; B, pivoted grate; *b*, projecting pivots on the ends of grate set to one side of central line of grate; *b'*, projection or stop on the outer edge of the outermost bar of light side of the grate, adapted to fit into recess *a*². C is the fire-box, against the sides of which

the grate-frame A is supported by means of the wedges *a*.

The simplicity of this device renders very little explanation necessary as to its construction and operation.

The wedges *a* are placed wherever necessary around the outer edge of the supporting-frame A, and are partially let into it, the portions so let in being preferably dovetailed to secure their attachment to frame.

The grate being pivoted on the supporting-frame, it can be partially rotated, its horizontal position being secured by the projecting lug or stop *b'* coming in contact with the under side of frame in the recess *a*². When turned upon its pivot, the heavy side brings it to its normal horizontal position by gravity.

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

1. The combination of fire-box C, grate-frame A, and wedges *a*, fitted into grate-frame and resting against the fire-box, substantially as described.

2. The combination of fire-box C, grate-frame A, and wedges *a*, fitted into the grate-frame and resting against the fire-box, and a grate pivoted in and supported by the grate-frame A, substantially as described.

In witness whereof I have hereunto set my hand.

HAMLET SUTCLIFFE.

Witnesses:

MARK ANTHONY,
GEO. W. WEFFINGER.