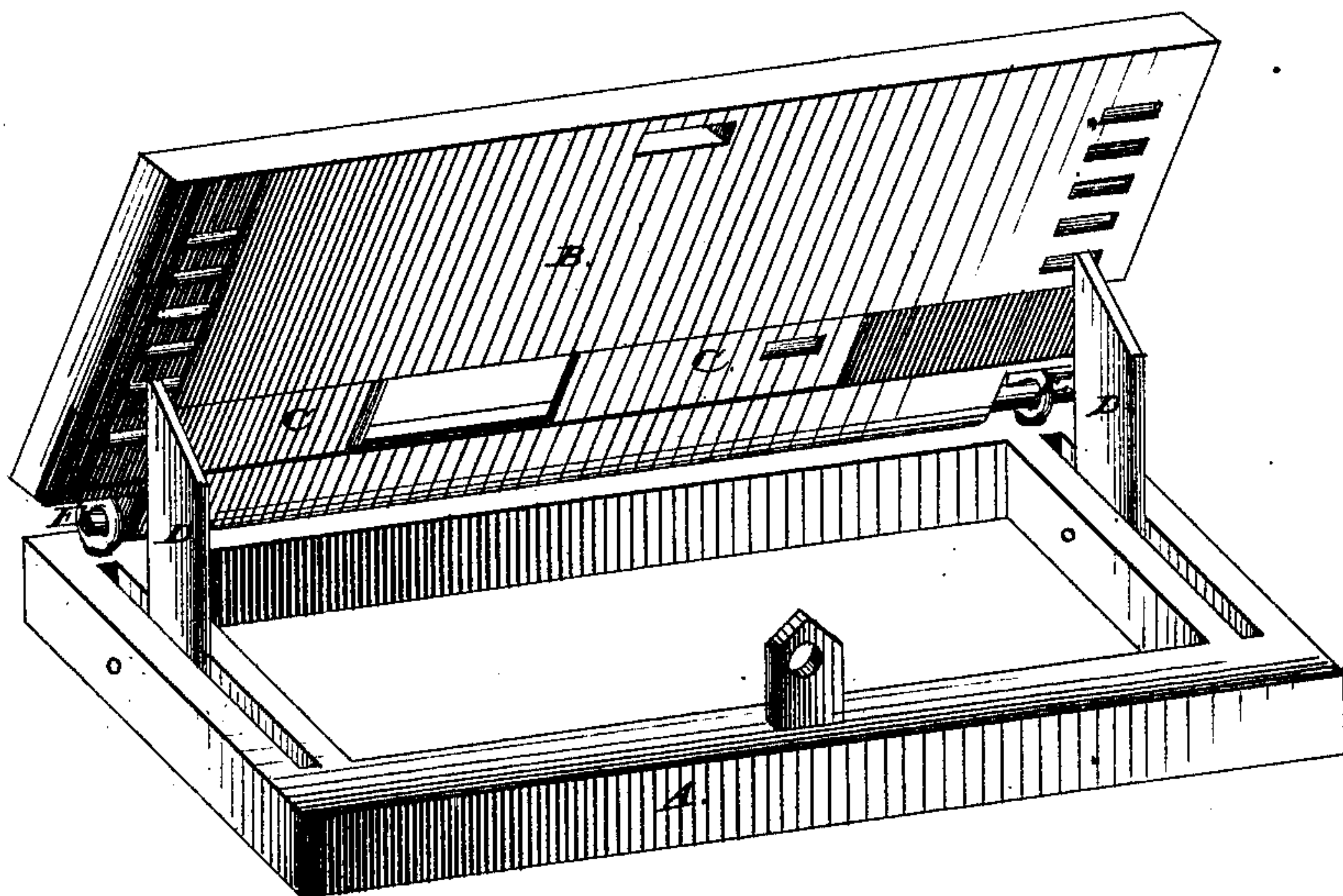


W. J. COX.  
Flat-Iron Heater and Reflector.

No. 197,205.

Patented Nov. 20, 1877.



Attest:

Ashley Brown  
Wm. W. Sheeler

Inventor:

William John Cox  
by B. Pickering  
Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM JOHN COX, OF HAMDEN JUNCTION, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO JOHN SOUTHWARD, OF MOUNT STERLING, OHIO.

## IMPROVEMENT IN FLAT-IRON HEATER AND REFLECTOR.

Specification forming part of Letters Patent No. **197,205**, dated November 20, 1877; application filed  
April 16, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM JOHN COX, of Hamden Junction, Vinton county, State of Ohio, have invented a Flat-Iron Heater and Reflector, of which the following is a specification:

My invention pertains to a convenient attachment to coal-grates by which smoothing-irons and vessels may be heated, and, when the lid of the device is not used for heating purposes, the plate of the same may be set in position to reflect the heat arising from the fuel of the grate.

The drawing shows the device in perspective.

The device consists of two principal parts, the frame A and lid B, the parts being made of cast-iron, and of sufficient strength to resist the action of the fire. For this purpose the lid should be suitably ribbed. It is used in connection with fire-grates, the forward part of the frame resting upon the grate, while the rear is supported on a projection of the chimney-back or upon spikes driven therein. The frame is rectangular, and should be of sufficient size to extend from the front of the grate to the back, and to cover the full length of the grate. In either end of the frame are slots, into which are pivoted the arms D, the ends of which enter notches in the lid, and serve to hold it in position when the lid is used as a reflector, and, when not thus used, fold into the slots, where they are out of the way. To the rear of the frame are hinges E, by which the lid is secured to the frame. Any other suitable form of hinge may be substi-

tuted. On the front of the frame is a projection, which, on closing the lid, enters an orifice within the same. This projection has an orifice by which the device may be handled, when it is necessary to remove it, by passing a poker through the said orifice. The lid has a series of notches near both ends for the reception of the ends of the arms, and has a quadrangular orifice near the rear side of the same, which can be covered by the slides C, which move within grooves of the lid. The object of this orifice is to permit the products of combustion to pass through it for the purpose of heating the plate; and by partially closing the slides the draft is cut off, thereby arresting the consumption of the fuel.

When the lid is used as a reflector it may be placed at any desirable angle, so that the heat of the grate may be reflected downward near to the grate, or so directed as to be more diffused through the room.

When used for the purpose of heating smoothing-irons or vessels the lid is let down onto the frame, and the articles set thereon, the slides being opened then for the purpose, as heretofore specified.

What I claim as my invention is—

The frame A, provided with arms D, to sustain the lid in oblique position, in combination with the lid B, having slides C C, substantially as and for the purposes set forth.

WILLIAM JOHN COX.

Witnesses:

JOSEPH T. BARRETT,  
SOLOMON LAUTZ.