W. RACE.

Stove Damper.

No. 11,386. Patented July 25, 1854.

Fig. 1.

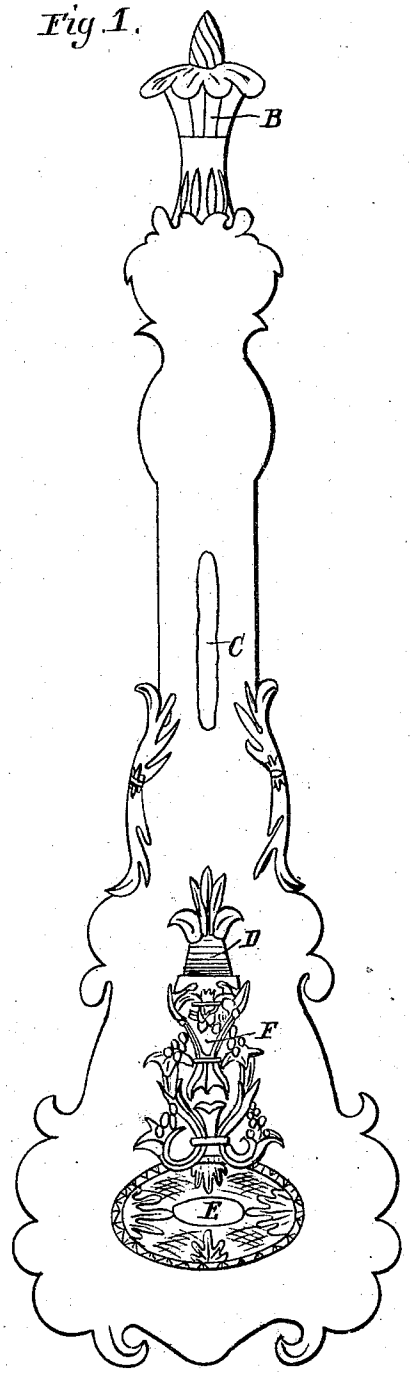
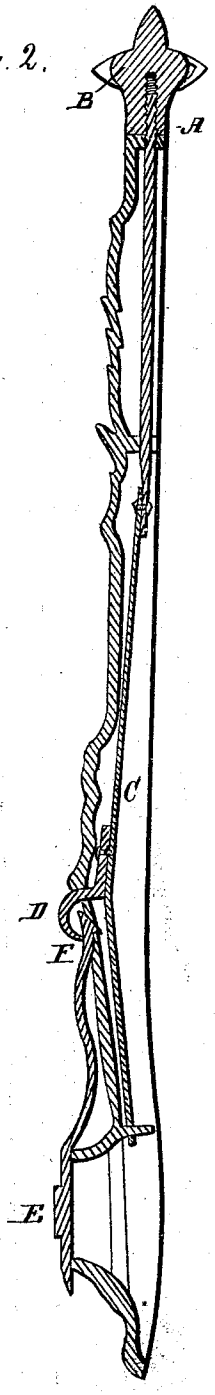


Fig. 2.



N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

WASHBURN RACE, OF SENECA FALLS, NEW YORK, ASSIGNOR TO H. C. SILSBY AND W. RACE.

STOVE-REGULATOR.

Specification of Letters Patent No. 11,386, dated July 25, 1854.

To all whom it may concern:

Be it known that I, WASHBURN RACE, of Seneca Falls, in the county of Seneca and State of New York, have invented a new Mode of Regulating the Heat of Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the annexed drawings, of which—

Figure 1 is a front view of the regulator; Fig. 2, is a sectional side elevation.

My invention consists in a certain mode of applying and regulating the expansion and contraction of metallic bar to act as a self regulating damper for stoves.

The bar acts by its expansion after the manner of the old and well known regnier's metallic thermometer, the principle of which consists in the fact that for a slight movement of the extremities of the bar caused by its expansion or construction a large lateral movement of the center of the bent portion takes place according to the law that the versed sine of the arc is twelve times the movement of the extremity of the bar. I am aware that this principle has been applied to stoves, but in such manner that the regulating screw has been placed where it was too much heated to approach at all times and where it was least efficient.

My invention consists briefly in applying the regulating screw where its action is most sensitive and is exposed to heat the least. The screw A and the thumb piece or nut B I place at the top of the stove as seen in the drawings and upon the end of the expansion bar C or the rod of metal to which it is affixed. There is attached to the middle of the bar C a projecting pin or hook D which in its movements back and forth operates upon the damper E to open and close it, through the intervention of the lever F. According to the necessities of the case, the heat of the stove is regulated by the set of the bent bar, obtained by screwing the upper end up or down. The action is quicker and most sensitive when the bent bar C is nearer a straight line.

Having thus described my invention, what I claim as new is—

Adjusting the stove regulator by attaching the nut and screw used for that purpose, at the top end of the same, and at the tops of the stove, in the manner and for the purposes set forth; and further than this mode of adjustment I do not claim.

WASHBURN RACE.

Sealed and delivered in the presence of—
J. C. PAYNE,
G. O. DANIELS.