(No Model.)

F. KAEMPEN, Jr.

DRAFT REGULATOR FOR STOVES, &c.

No. 549,067. Patented Oct. 29, 1895.

Fig. 1.

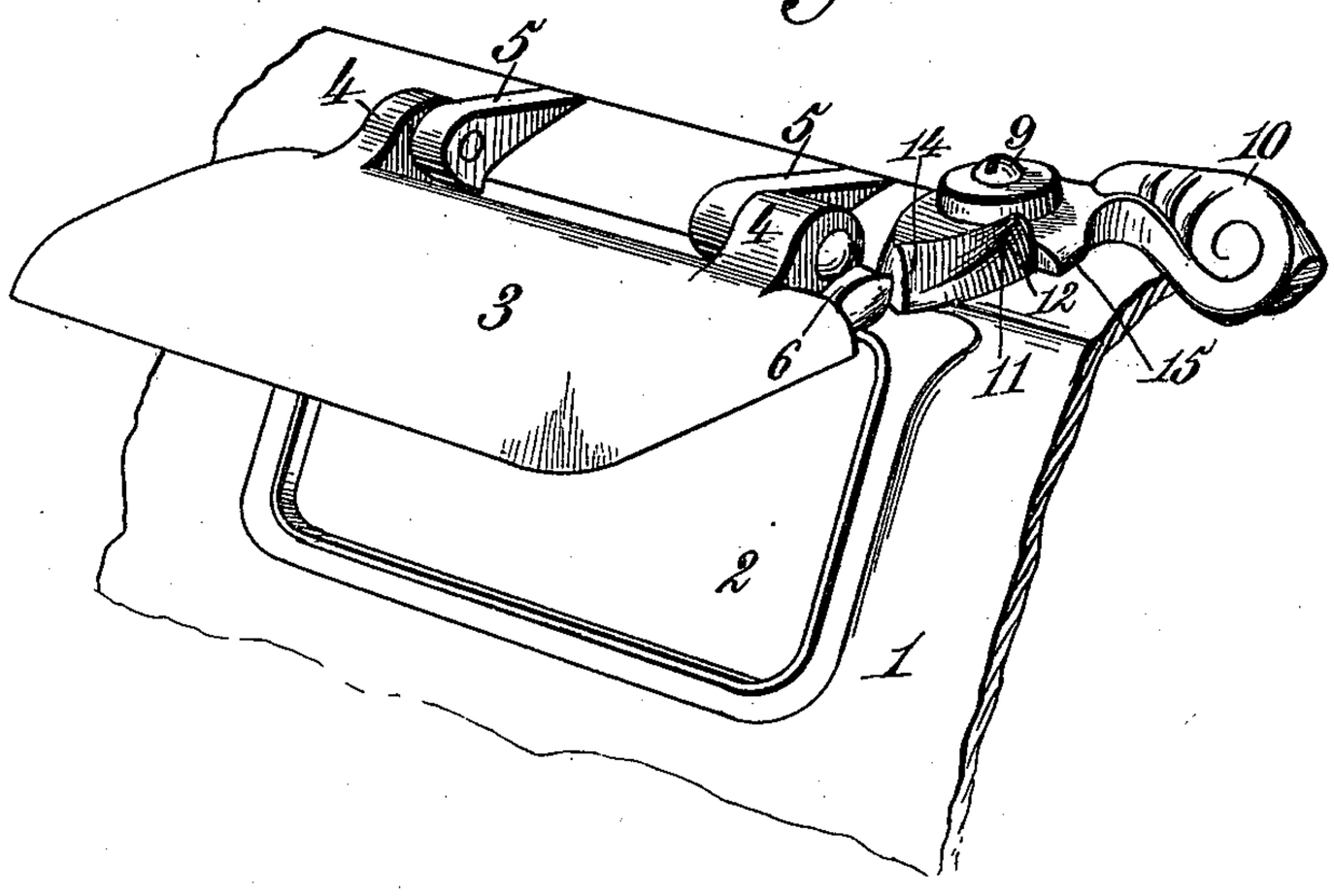


Fig. 2.

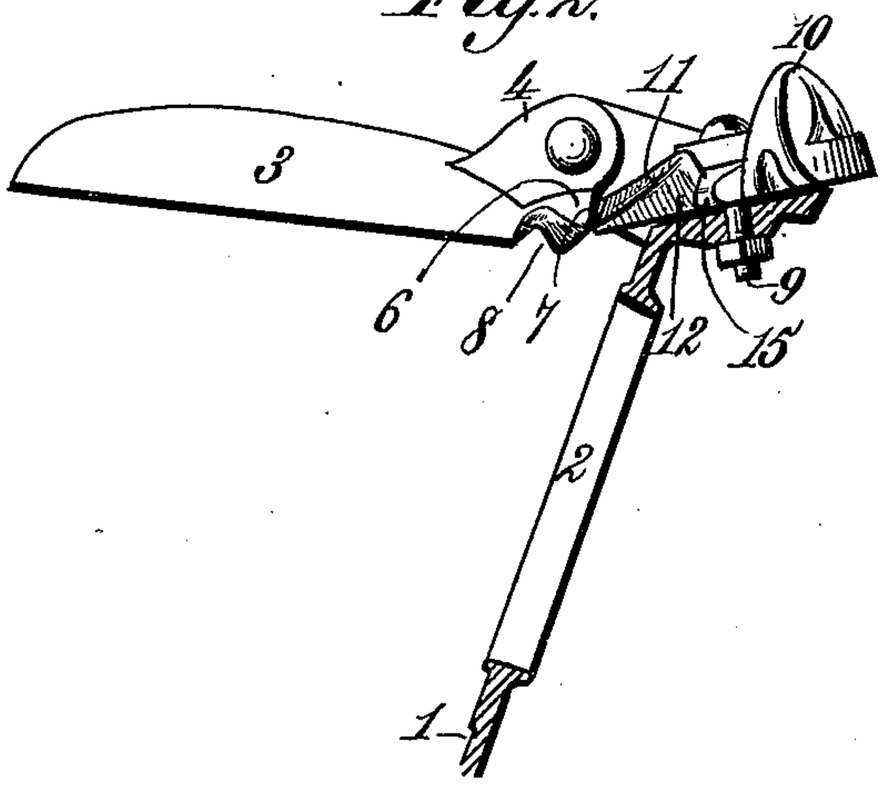


Fig. 3.

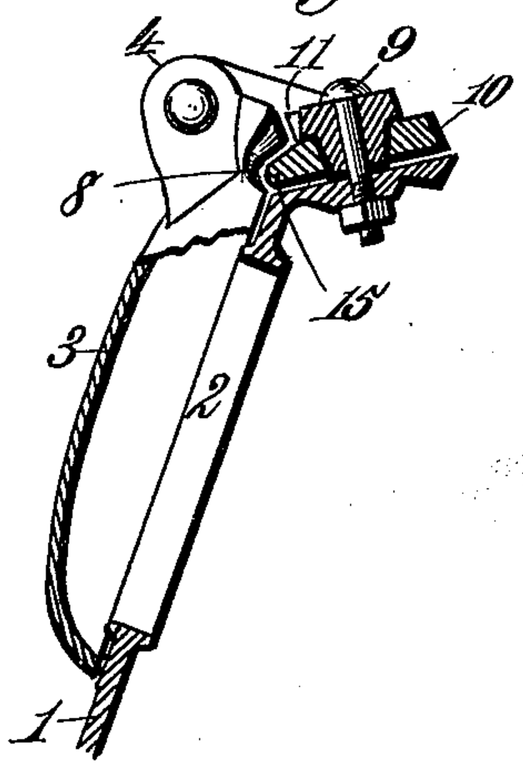
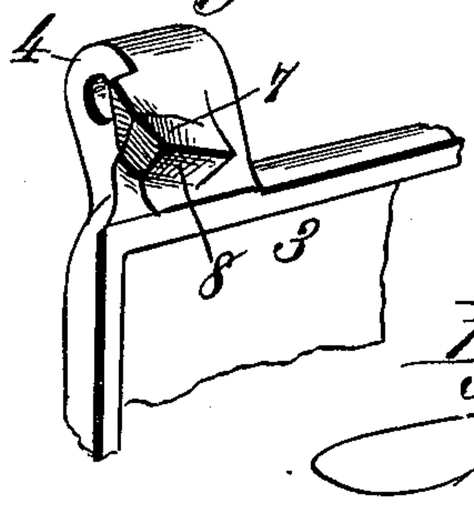


Fig. 4.



Witnesses.
Robt Everett.
Thos. A. Green

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Folkert Kaempen Jr.
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UNITED STATES PATENT OFFICE.

FOLKERT KAEMPEN, JR., OF QUINCY, ILLINOIS, ASSIGNOR TO THE GEM CITY STOVE MANUFACTURING COMPANY, OF SAME PLACE.

DRAFT-REGULATOR FOR STOVES, &c.

SPECIFICATION forming part of Letters Patent No. 549,067, dated October 29, 1895.

Application filed May 2, 1895. Serial No. 547,908. (No model.)

To all whom it may concern:

Be it known that I, FOLKERT KAEMPEN, Jr., a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented new and useful Improvements in Draft-Regulators for Stoves, &c., of which the following is a specification.

This invention relates to draft-regulators for ranges, cook or heating stoves, and has for its object to provide improved means for opening and closing the damper or hinged door controlling the admission of air to the fire for supporting combustion and for holding said door open and locking the same when closed.

To these ends my invention consists in the novel features and in the construction or arrangement of parts hereinafter fully described, and pointed out in the claims following the description, due reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a perspective view illustrating the damper open. Fig. 2 is a sectional elevation, the parts being shown in the same position. Fig. 3 is a similar view showing the damper closed. Fig. 4 is a detail view illustrating the projecting lug on the damper.

I have illustrated my invention as applied to the base-door of a stove; but it will be evident that it can be applied to any portion of the stove wherein a draft-regulator is employed.

In order that those skilled in the art may make and use my invention, I will describe the same in detail, reference being had to said drawings, wherein—

The numeral 1 indicates the base-door of a stove, 2 the draft-opening formed therein, and 3 the damper controlling said opening. As shown, said damper consists of a door hinged at its upper edge by hinge-knuckles 4 to corresponding hinge-knuckles 5, formed on the base-door. Projecting from one of the hinge-knuckles 4, formed on the damper 3, is a lug 6, having an inclined upper face 7 and provided upon its under side with a cam-face 8, for the purpose hereinafter described. Secured to the base-door 1 is a pivot-bolt 9, upon which is journaled the damper-operating lever 10. Said lever at one edge is provided with a cam 11, that is formed eccentrically to the center of said lever, and is undercut upon its lower side, as at 12, so as to overhang the inclined upper face 7 of the lug 6, formed on the hinge-knuckle of the damper, said cam 11 gradually increasing in thickness from its inner to its outer end, where it terminates in an abrupt inclined shoulder 14. The operating-lever 10 is also provided with an inclined cam projection 15, adapted to engage the cam-face 8, formed on the under side of the lug 6, said cam projection being inclined in a direction opposite to the inclination of the cam 11, before described.

The operation of my improved device is as follows: Let it be assumed that the damper is closed. Then by swinging the handle 10 toward the right the overhanging portion 12 of the cam 11 engages the inclined upper face 7 of the lug 6 and swings said damper up upon its hinges, and the cam 11 being formed eccentrically, as described, it will continue to bear upon the said inclined face 7 of the lug as the latter is forced downward and outward by the continued rotation of the lever until the abrupt inclined shoulder 14 bears against the inclined face 7 of the lug 6, at which time the damper will have swung wide open and will be held in such position by the said shoulder. Upon swinging the lever in the opposite direction the cam 11 gradually recedes from the inclined face 7 of the lug and permits the damper to swing down and close. Upon the continued rotation of the lever in the same direction the inclined cam projection 15 engages the cam-face 8, formed on the under side of the lug 6 and forces said lug upward and outward, thus forcibly closing the damper and locking it in its closed position.

From the foregoing it will be understood that the cam-faces of the operating-lever 10 may be caused to engage the opposite faces of the lug 6, and either hold the damper open or lock it closed, the single lug serving for both purposes, the said faces of the lug being alternately engaged by said cam as the lever is swung upon its pivot-bolt in opposite directions to open and close the damper.

Having described my invention, what I claim is—

1. In a stove, the combination with a dam-

per hinged over a draft opening and provided with a projecting lug arranged to one side of the hinge pintle and having inclined upper and under faces, of an oscillating lever provided with a cam 12 formed eccentrically to the pivotal center of said operating lever and adapted to engage the inclined upper face of said lug to open the damper, and also provided with a cam 15 having an upper inclined face adapted to engage the under inclined face of the said lug to lock the damper closed, the ending of the cam 15 and beginning of the cam 12 being co-incident, substantially as described.

2. In a stove, the combination with a damper hinged over a draft opening and provided with a laterally projecting lug arranged to one side of the hinge pintle and having an upper inclined face, of an oscillating operating lever provided with a cam 12 adapted to engage the inclined upper face of said lug, the said cam being formed eccentrically to the pivotal center of said operating lever and provided with a cam-faced shoulder 14 for engaging said lug and holding the damper open, the cam-faced shoulder 14 beginning at the point where the cam 12 ends, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FOLKERT KAEMPEN, JR.

Witnesses:
WM. H. HEIDBREDER,
HERM HOENER.