(No Model.)

# R. A. MAY.

## DRAFT REGULATOR FOR HEATING FURNACES.

No. 472,305. Patented Apr. 5, 1892.

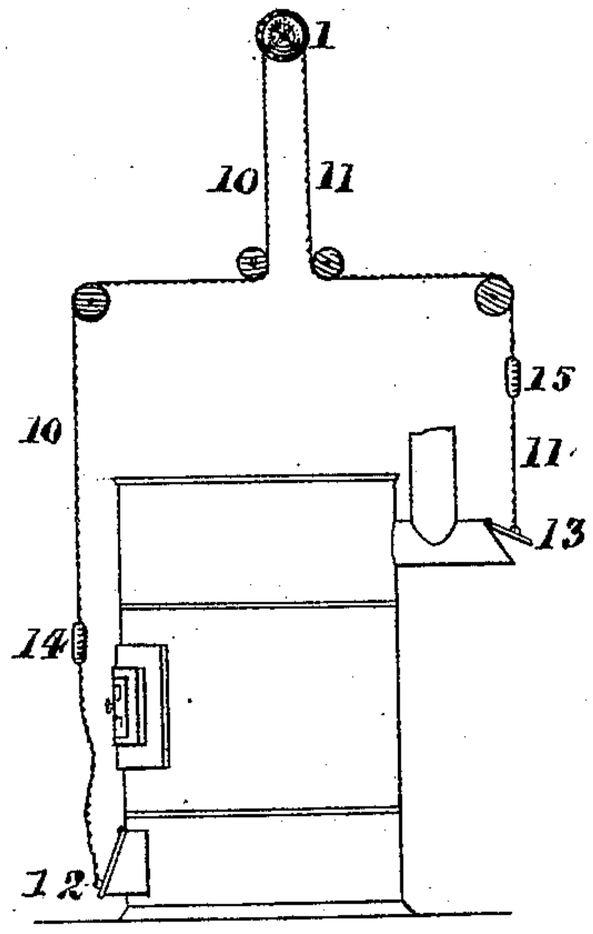


Fig. 1.

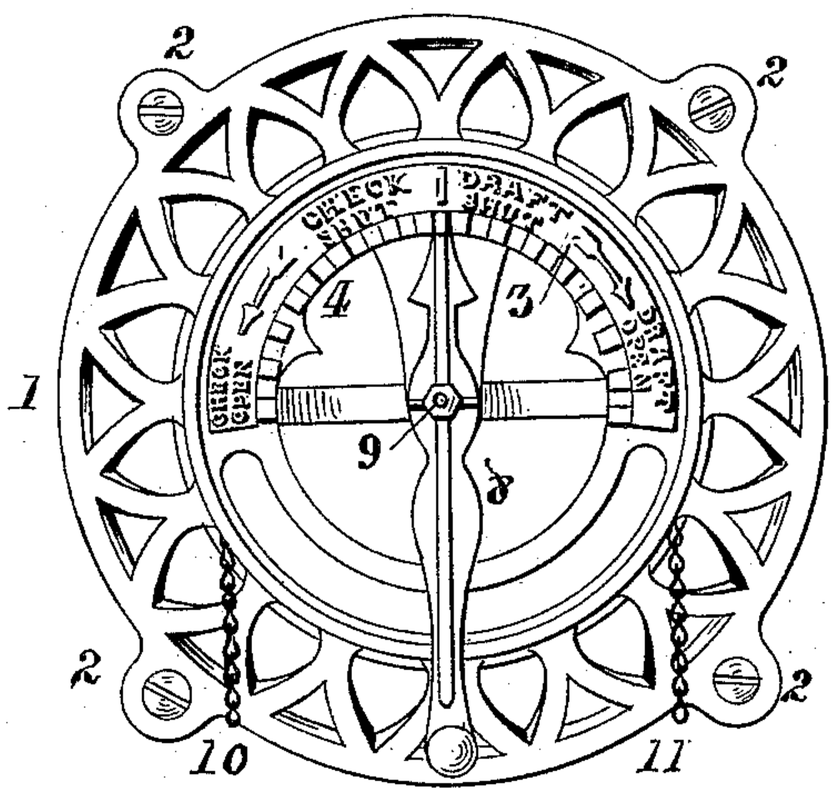


Fig. 2.

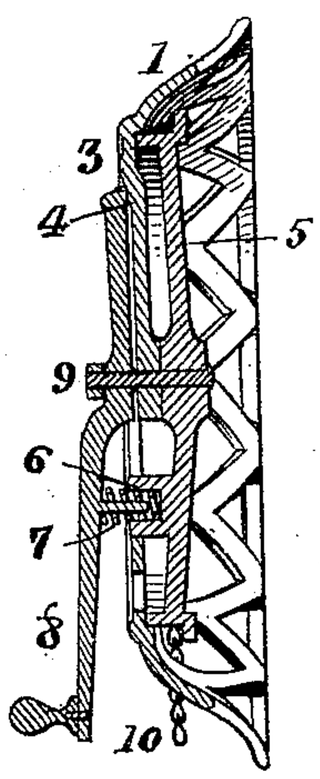


Fig. 3.

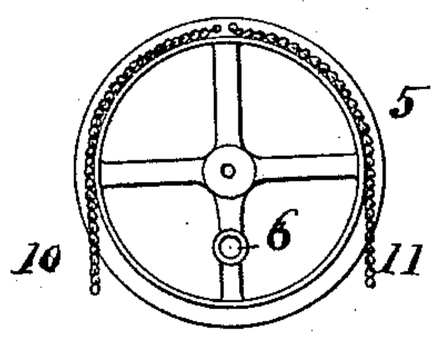


Fig. 4.

Witnesses
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# UNITED STATES PATENT OFFICE.

RUDOLPH A. MAY, OF AKRON, OHIO.

## DRAFT-REGULATOR FOR HEATING-FURNACES.

SPECIFICATION forming part of Letters Patent No. 472,305, dated April 5, 1892.

Application filed December 1, 1891. Serial No. 413,637. (No model.)

*To all whom it may concern:*

Be it known that I, RUDOLPH A. MAY, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Draft-Regulators for Heating-Furnaces, of which the following is a specification.

My invention has relation to improvements in devices for regulating the draft in heating-furnaces by reducing or closing the entrance of air to the fire or by retarding the draft by introducing air into the uptake-flue, or both.

The object of my invention is to provide new and improved devices by which the draft-door and damper-door may be operated and regulated from a part remote from the furnace, as when the furnace is situated in the cellar or basement and the regulator is situated in an upper room.

My invention consists in the peculiar and novel construction, arrangement, and combination of parts hereinafter described, and then specifically pointed out in the claim, reference being had to the accompanying drawings, forming a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different views, Figure 1 is an outline drawing showing the application of my improved apparatus to a furnace; Fig. 2, a front elevation of my improved draft-regulator; Fig. 3, a central vertical transverse section of the same, and Fig. 4 a reduced detail of the winding-pulley hereinafter described.

Referring to these drawings, 1 is a case of cast metal, saucer or basin shaped in form, which may be plain or ornamented, as desired, and having ears 2, with which it may be attached by screws or other device to any selected surface. On the outer face of this case is a semicircular dial 3, bearing words, figures, or other indicia to direct the movement or location of the operating-handle, beneath and concentric with which is a notched segment 4. On the inside of this case 1 is a pulley 5, (shown reduced in Fig. 4,) having at one side a flange, its other side resting against the inner face of said case, which thereby constitutes an opposite flange or guard for the chain or cord hereinafter mentioned. In the face of this pulley is a socket 6 to receive and hold a concealed spring 7, which constantly forces outward the longer end of a lever 8, this lever being connected with the pulley 4 by a bolt 9 and having a pointer to indicate its position on the dial, and a handle by which it is manipulated. This lever is sufficiently free on the bolt 9 to rock thereon, and has at this pointer end a tooth or projection arranged to engage and rest in one of the notches in the segment 4, and be thereby retained, its opposite end being normally forced outward by the spring 7. Connected with the pulley 5 at substantially the same point are two chains 10 11, which, passing under and over guide-pulleys (shown in Fig. 1) and respectively to the draft-door 12 and damper 13, are arranged when the pointer of the lever 8 is central to allow both doors to close by gravitation, but when the lever is rocked either to the right or left to open the draft or check damper, respectively. On these chains are weights 14 15 to keep each chain taut above its respective door when slackened by the opening of the opposite door.

I have referred to chains for operating the dampers; but it will be obvious that wire or other cords may be employed for the purpose.

I claim as my invention—

In a draft-regulator for heating-furnaces, the combination of the case having a notched segment, the flanged pulley journaled on its inner face and having a spring-socket, of the lever mounted and arranged to rock on said pulley-pivot and engage said notches and rotate said pulley and a spring interposed between the said pulley and lever to cause said lever to engage said notches, substantially as shown and described.

In testimony that I claim the above I hereunto set my hand.

RUDOLPH A. MAY.

In presence of—
C. P. HUMPHREY,
C. E. HUMPHREY.