

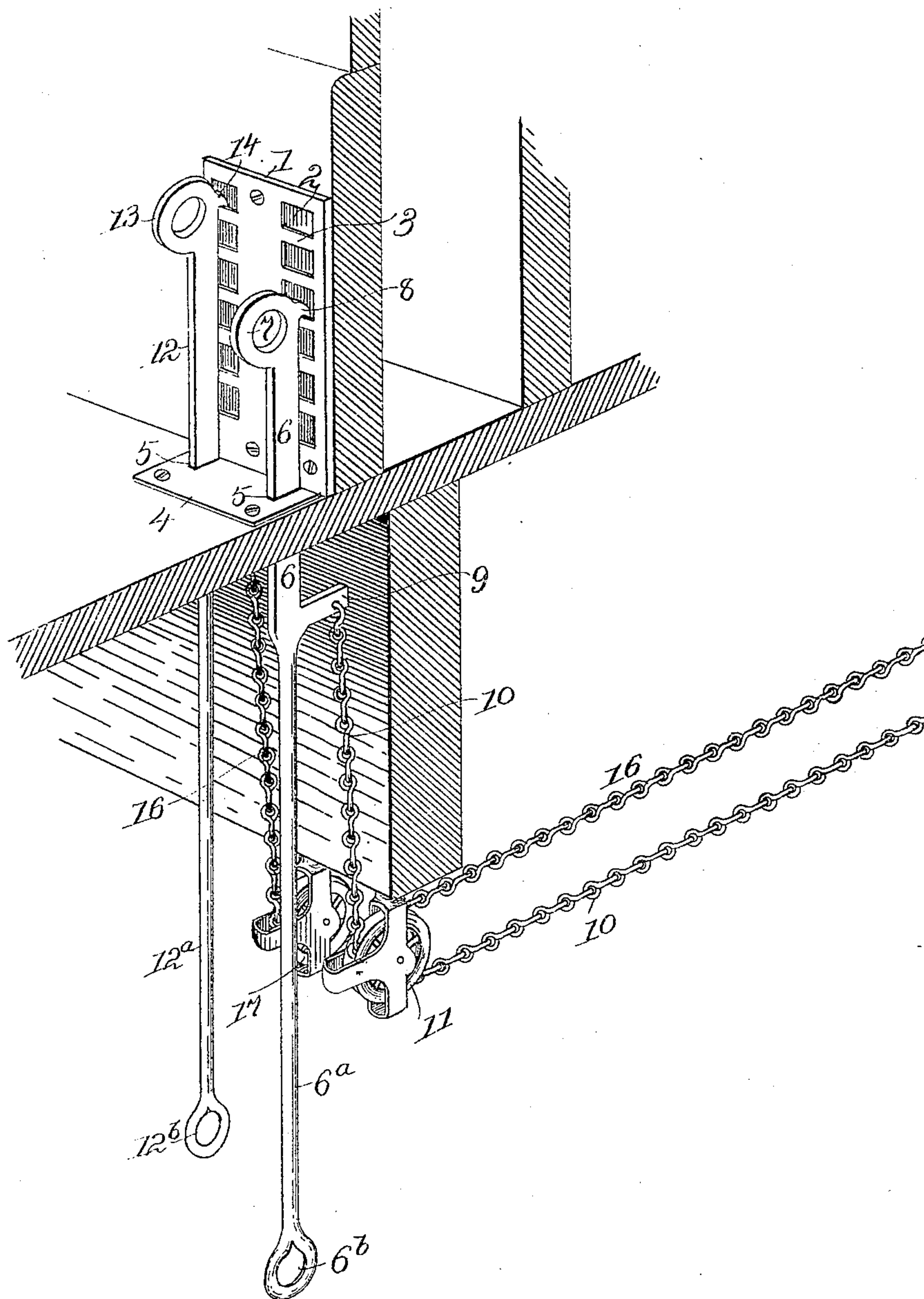
No. 808,211.

PATENTED DEC. 26, 1905.

W. F. PICKLE.

DAMPER REGULATOR FOR FURNACES.

APPLICATION FILED JAN. 28, 1905.



Witnesses.

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UNITED STATES PATENT OFFICE.

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DAMPER-REGULATOR FOR FURNACES.

No. 808,211.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed January 28, 1905. Serial No. 243,126.

To all whom it may concern:

Be it known that I, WILLIAM F. PICKLE, of the city of Decatur, county of Macon, and State of Illinois, have invented a certain Improved Damper-Regulator for Furnaces, of which the following is a specification.

This invention is intended to provide means for controlling the draft of furnaces; and the object is to enable the dampers to be shifted either from the basement or from the first floor.

The invention is exemplified in the structure hereinafter described, and it is defined in the appended claims.

In the drawing forming part of this specification the invention is illustrated in perspective, the floor and a wall being shown in section and two damper-regulators being included in the drawing.

A plate 1 is secured to a plinth or base-board in a vertical position immediately above the floor, and such plate is slotted at intervals to form the cross-bars 3. The slots are shown at 2, and they are preferably disposed in two sets or tiers. Another plate 4 is secured to the floor adjacent to plate 1, and this horizontal plate has a pair of oblong slots at 5. A regulating-bar 6 is shaped to slide in one of the slots 5, while fitting the same somewhat closely. A lift-ring 7 is formed on the upper end of bar 6, and a hook 8 projects from the lift-ring in position to engage the bars 3 in one of the tiers of plate 1. The bar 6 extends through the floor and below the same for several inches. Its downward extension preferably assumes the form of a rod, as shown at 6^a. A ring, as 6^b, is preferably formed on the lower end of the rod, and a lug 9 projects at right angles from the bar just below the floor. The lug extends in the same direction as the hook 8, and a chain 10 runs from the lug, around a pulley 11, and off to a damper of the furnace. Another regulating-bar 12 has a lift-ring 13, a hook 14, a rod extension 12^a, a ring 12^b on the rod extension, and a lug which is in this instance obscured by the floor, but is identical with lug 9 of bar 6. A chain 16 runs from the lug of bar 12, around a pulley 17, and off to another damper of the furnace.

The two bars and adjuncts thereof are precisely the same. Each embodies my invention, and both are shown for the reason that two are usually needed to completely control a furnace. The location of the pulleys and the directions taken by the chains are sug-

gestive merely, and these features are of course varied to adapt the use of the regulators to various conditions, depending upon the location of the furnace with relation to a convenient situation for the regulators and upon suitable supports for the pulleys.

The regulating-bars are set higher or lower to vary the positions of the dampers by manipulating lift-rings 7 and 13 when the operator is on the first floor and by manipulating rings 6^b and 12^b or the rod extensions when the operator is in the basement. In either case the bars are rocked in slots 5 to disengage the hooks, are raised or lowered to the desired extent, and are again rocked slightly in the slots to reengage the hooks. The bars being non-circular in cross-section are unable to turn in the corresponding slots and are therefore always in position to present the hooks to the cross-bars. The chains pull the hooks toward the cross-bars and facilitate the operation of hooking the regulating-bars in place.

The cross-barred plate 1 illustrates the preferred way of providing supports for the regulating-bars; but it is obvious that the essential thing is a plurality of bars or equivalent thereof at different heights and that these may be provided in various ways.

By the use of my invention the dampers may be shifted from above in the usual way and may also be shifted from the basement through the same shifting mechanism. If, for instance, the dampers are found to be open when it is desired to supply the furnace with fuel, it is not necessary to run upstairs to unhitch a regulating-chain in order to prevent smoking up the house by opening the fuel-door while the dampers are also open, and other advantages will readily occur to those skilled in the care of furnaces.

I claim—

1. In a damper-regulator, the combination of a set of cross-bars arranged one above another and above a floor, a draft-regulating bar adapted to extend through the floor, a hook on the upper end of the bar, a lug on that part of the bar extending below the floor, said lug extending in the same direction as the hook, and a chain connecting with the lug.

2. In a damper-regulator, the combination of a set of cross-bars arranged one above another near the floor of a room, a non-circular regulating-bar having a hook to engage the cross-bars, a floor-plate having a slot conforming to the cross-sectional outline of the

regulating-bar and through which the regulating-bar extends, a lug on the regulating-bar beneath the floor and a damper-controlling chain connecting with the lug.

- 5 3. In a damper-regulator, the combination of a cross-barred plate in a vertical position, a slotted floor-plate, a regulating-bar extending through the floor-plate and through the floor, a lift-ring on the upper end of the bar,
10 a hook on the lift-ring, a manipulating ex-

tension of the bar extending below the floor, a lug on the bar below the floor and a damper-controlling chain connecting with the lug.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

WILLIAM F. PICKLE.

Witnesses:

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