

F. C. KASCH AND G. F. NEFF.
 MOUNTING FOR DRAFT REGULATORS.
 APPLICATION FILED DEC. 3, 1921.

1,422,868.

Patented July 18, 1922.

Fig. 1.

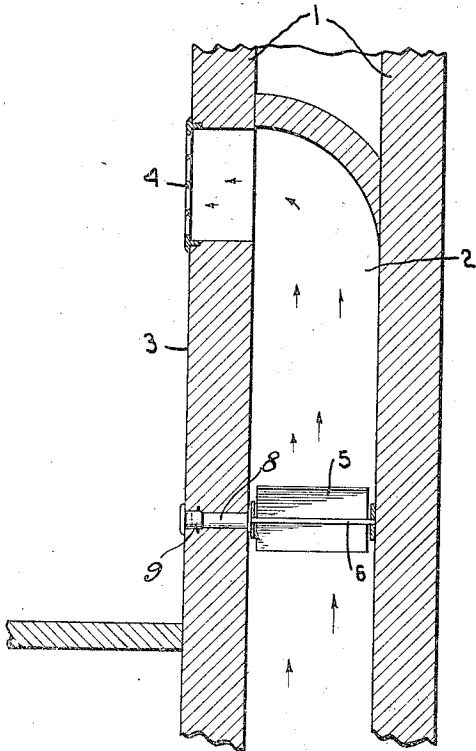


Fig. 2.

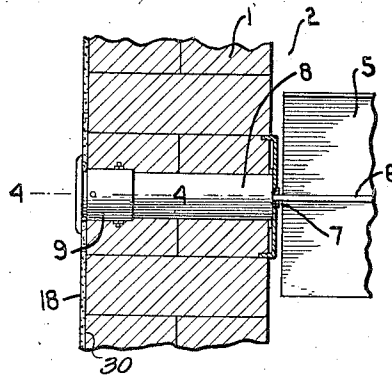


Fig. 3.

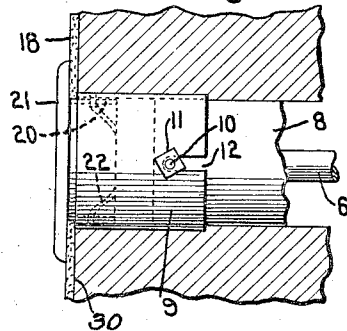


Fig. 5.

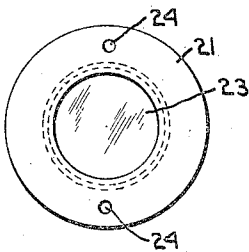


Fig. 6.

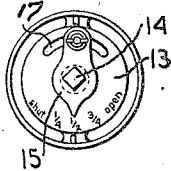


Fig. 7.

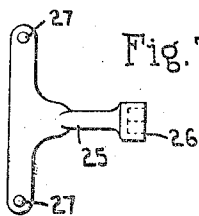
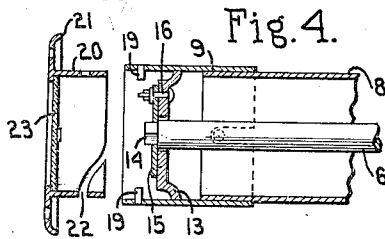


Fig. 4.



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MOUNTING FOR DRAFT REGULATORS.

1,422,868.

Specification of Letters Patent.

Patented July 18, 1922.

Application filed December 3, 1921. Serial No. 519,608.

To all whom it may concern:

Be it known that we, FREDERICK C. KASCH and GEORGE F. NEFF, citizens of the United States, and residents of Akron, county of Summit, and State of Ohio, have invented certain new and useful Improvements in Mountings for Draft Regulators, of which the following is a specification.

This invention relates to dampers or draft regulators and is directed to a new and improved method of mounting the draft regulator in the walls of a building so as to be simple and easy to install and to present a neat appearance.

While not limited to such use, it is particularly adaptable for use in schools, halls or other public buildings being so designed as to be easy of access and at the same time to fit against the wall of the room snugly and to be so constructed as to prevent tampering by the school children or unauthorized persons. The regulator housing mechanism is especially constructed so as to be capable of being adjustably mounted so as to bring the cover plate flush with the wall.

These and other objects will be apparent from the description and drawing which is intended to disclose one embodiment of the invention, which is capable of realization in other forms and modifications.

In the drawing Fig. 1 represents a cross section through a wall and flue with our improvement in place.

Fig. 2 is a cross section through the wall showing the mounting.

Fig. 3 is a vertical section through the wall showing a portion of the mounting in enlarged form.

Fig. 4 is a cross section on the line 4-4 of Fig. 2, the outer cover plate being removed.

Fig. 5 is a front view of the cover plate.

Fig. 6 is a view of the indicating dial.

Fig. 7 is a view of a tool which is especially adaptable for use with the damper.

In the drawing 1 represents the wall of a building or room in which is located the flue 2, which may be a heating or ventilating flue which leads to the room 3 by a register 4.

In the flue 2 is located a damper, here shown as an ordinary butterfly damper 5, the axis of which is indicated by the numeral 6, located in trunnions 7 on the walls of the flue. 8 indicates a housing in the form of a tube or sleeve which is set in the wall

of the building, being of such length as to extend from the flue to a point near the outer surface of the wall 1. While the approximate thickness of the wall may be known before the equipment is furnished, variations will occur and it is impossible to furnish the tube 8 in the exact length required in all cases. For this reason we mount on the end of the tube 8 a supplementary tube or collar 9, which telescopes over the end of the tube and is secured in proper position of adjustment by bolts 10 and nuts 11, the bolts being mounted in the end of the tube 8 and being received in slots 12 in the collar. By this device the bricklayer or carpenter in building the wall is enabled to accurately position the extension 9 of the tube so that it will be flush with the surface of the brick wall or studding which is indicated by the numeral 30.

Located within the tubular extension 9 is an indicating plate 13 which receives the forward end of the shaft 6 of the damper and is provided with suitable notations to indicate the position of the damper. The forward end of the shaft is formed with a squared extension 14 to which is attached a pointer 15 one end of which is provided with suitable clamping means 16 co-operating with an arcuate slot 17 in the plate 13 by which the damper is secured in position.

The end of the extension 9 is so adjusted as to be flush with the brick or studding of the wall. The plaster is indicated by the numeral 18 and the part 9 is constructed so as to receive a suitable cover plate which will be arranged to come to position against the face of the plaster irrespective of the thickness thereof. On the inner surface of the extension are located two or more inwardly projecting pins or studs 19 and in the end of the collar is received the circular flange 20 of the cover plate 21. In the flange 20 are provided a number of spiral grooves or slots 22, equal to the number of pins and adapted to be received over the pins. The construction of the spiral grooves permits the cover plate to be turned, so that it will be securely held in the end of the tubular extension and will bear against the outer surface of the wall, notwithstanding variations in the distance between the surface of the wall and the outer surface of the plate as such differences may occur in different buildings or in the same building.

The cover plate is provided with a glazed

window or sight 23, by which the adjustment of the damper may be observed and with any suitable means by which it can be turned, as by holes 24 in the outer periphery
5 of the cover plate.

A suitable tool for use by the janitor or care taker is shown in Fig. 7 in which 25 indicates the tool having a wrench head 26 for engagement with the end of the shaft
10 6 and a pair of pins 27 for engagement with the holes in the cover plate.

It will be seen that there is provided a simple and economical form of mounting for damper or draft regulator which is so constructed as to be adjustable for varying
15 thicknesses of wall and plaster so as to bring the cover plate to a position flush against the surface of the wall, where it will present a neat appearance and cannot be easily tampered with, the pitch of the spiral groove
20 being such that the cover plate will be securely held in position.

The invention herein disclosed is not limited to exact form or proportions but may be varied or modified within the scope of
25 the invention as defined by the claims appended hereto.

Claims:

1. A draft regulator comprising a damper,
30 a rotary shaft for the damper, a tubular housing to receive the shaft, a longitudinally adjustable extension on said housing, means to secure said extension in varying positions of adjustment so as to be flush with a wall,
35 a cover plate on the end of the extension, spiral grooves in the cover plate and pins on the extension adapted to be received in the grooves, whereby the cover plate can be rotated into positions at varying distances
40 from the end of the extension.

2. A draft regulator comprising a damper, a rotary shaft for the damper, a tubular housing to receive the shaft, an extension slidably carried by the end of said housing,
45 means to adjustably secure the extension relative to the housing so as to vary the total length thereof, a cover plate, said cover plate being telescopically received within the extension and means to hold the cover plate
50 in any position of adjustment relative to the extension.

3. A draft regulator, comprising a damper, a shaft for said damper, and means to house the shaft in said wall and permit access

thereto, for operation of the damper, said
55 means comprising a tube set within the wall, an extension carried by said tube, means to adjust permanently said extension relative to said tube and removable cover plate said extension and cover plate having co-operating
60 means by which the latter may be held in varying positions with respect to the end of the extension.

4. A draft regulator, comprising a damper, a shaft for said damper, and means to house
65 the shaft in said wall and permit access thereto for operation of the damper, said means comprising a tube set within the wall, an extension slidable on said tube, means permanently to adjust the extension with
70 respect to the tube, a removable cover plate rotatively mounted on the extension, said cover plate and said extension having co-operating spiral grooves and pins by which the cover plate may be held in varying positions
75 with respect to the end of the extension.

5. A draft regulator, comprising a damper, a shaft for said damper, means to house the shaft within the wall comprising a tube, a tubular extension fitting over the tube, means
80 to secure the extension in any position of telescopic adjustment on said tube, a bearing plate for the shaft of the damper located in the extension, pins located near the outer end of the extension, a glazed cover plate
85 having a circular flange receivable within the extension and spiral grooves in the flange adapted to pass over the pins.

6. A draft regulator, comprising a damper, a shaft for the damper, and means to house
90 the shaft in said wall comprising a tubular housing, a longitudinally slidable extension on the outer end of said housing, a pin and slot connection between said housing and said extension, means associated with said con-
95 nection to fix the parts in relative position so as to vary the total length thereof, a removable cover plate on the end of said extension, said extension and cover plate having cooperating spiral grooves and pins by
100 which the cover plate may be held in varying positions with respect to the end of the extension and means to operate the shaft secured to the end thereof within the cover plate.

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