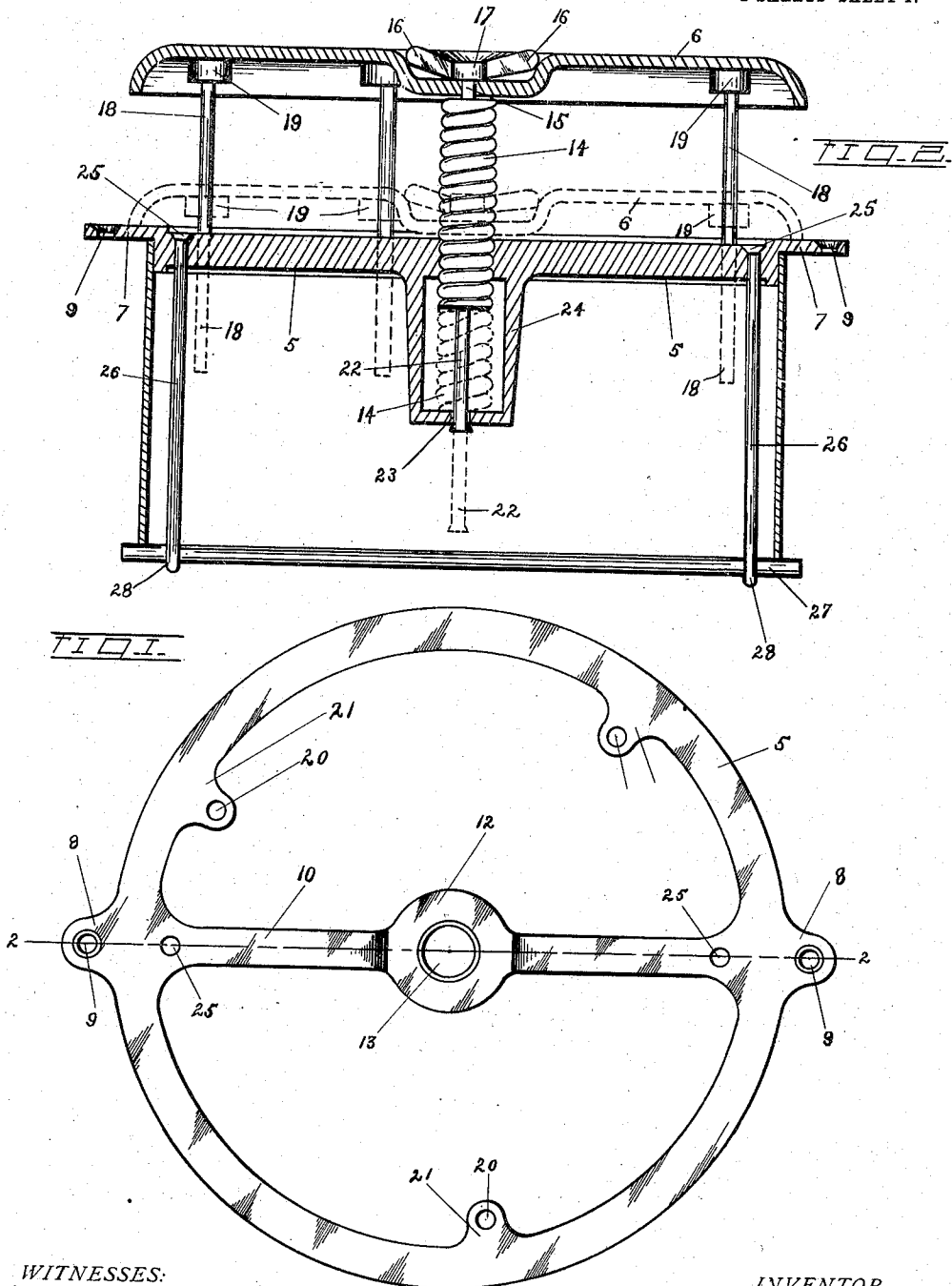


J. T. McELPATRICK.
REGISTER.
APPLICATION FILED APR. 19, 1912.

1,062,177.

Patented May 20, 1913.

2 SHEETS—SHEET 1.



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2 SHEETS-SHEET 2.

FIG. 4.

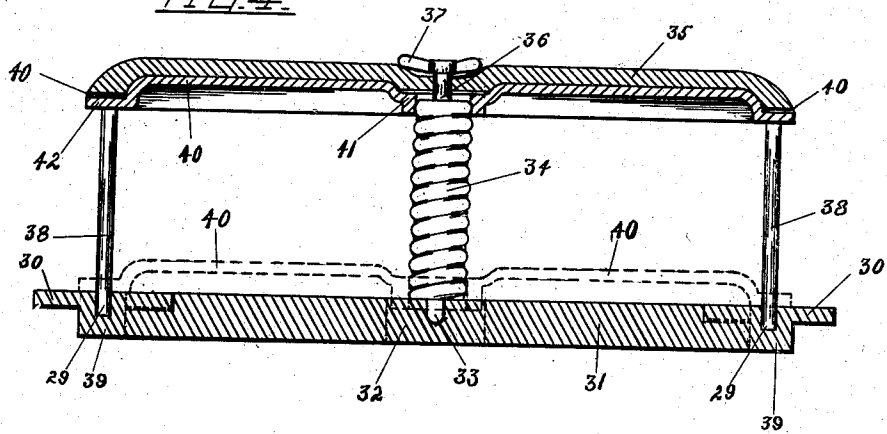
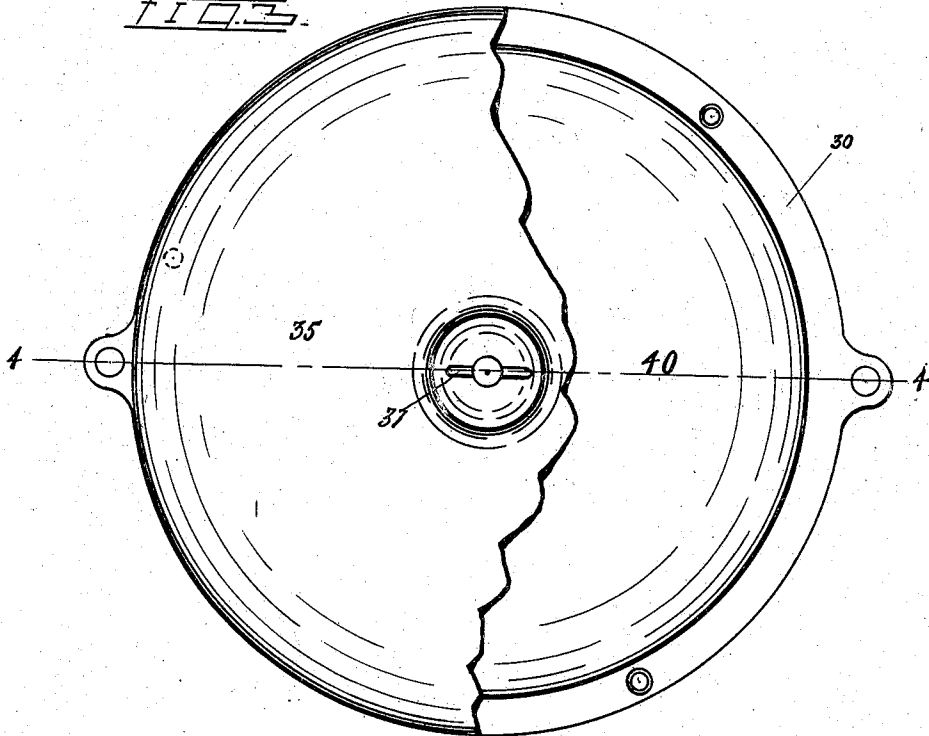


FIG. 3.



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1,062,177.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed April 19, 1912. Serial No. 691,866.

To all whom it may concern:

Be it known that I, JAMES T. McELPATRICK, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Registers; and I do declare the following to be a full, clear, and exact description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in registers and has for its object the provision of a simple and inexpensive device for controlling the entrance of hot air into a room or auditorium.

Another object of my invention is to provide a register capable of being conveniently and quickly installed.

Another object of my invention is to provide an arrangement for effectively and conveniently anchoring the register in position.

Another object of my invention is to provide a register with relatively few parts.

With these and other objects in view I will proceed to describe my invention with reference to the accompanying drawings, forming a part hereof.

There are two forms of my invention illustrated in the accompanying drawings and described in the following specification but it will be evident by reference to the appended claims that the invention is by no means limited to the structure disclosed and that the same may be materially modified and changes made without departing from the spirit or scope of my invention.

In the drawings:—Figure 1 is a top plan view of the frame work of my register showing the cover or controlling member removed. Fig. 2 is a cross section taken on the line 2—2, Fig. 1, with the cover in position. Fig. 3 is a top plan view in partial section of a modified form of my improved register. Fig. 4 is a cross section taken on the line 4—4, Fig. 3.

My improved register may be used for controlling the induction of air to a room or auditorium, as well as for controlling the induction of the heat. In buildings or auditoriums which are heated by hot air, my device serves the purpose of both a ventilator register and heat register, since the heated

air, in addition to heating the building or auditorium, serves to ventilate the same. In fact it matters not for what purpose my improved register is used as I anticipate its adaptability to various purposes or uses.

The same reference characters indicate the same parts in the different views of the different forms.

Referring first to the form illustrated in Figs. 1 and 2, let the numeral 5 designate the curbing or frame for a ventilator shaft or heating shaft and the numeral 6 an adjustable closure for the ventilator shaft or heating shaft. Those skilled in the art to which my invention appertains will readily understand that the curbing or frame 5 is adapted to be fitted into the ventilator opening, while the flange 7, with which the curbing or frame 5 is provided rests upon the floor or wall surrounding the said opening. The frame 5 is provided with a transverse bar 10, having an enlarged central portion 12, provided with an interiorly threaded opening 13, in which opening a screw 14 is threaded. This screw 14 is attached to the closure 6 by means of a reduced part 15, which is journaled in the center of the closure 6 and to this reduced part 15 a butterfly operating member 16 is made fast on the outer side of the closure. The closure 6 is provided with a recess 17 in which the butterfly operating member 16 is arranged. This closure 6 is of saucer shape and to the inner surface of the latter I rigidly secure pins 18, which are reinforced or made fast with the closure 6 by means of lugs 19, which are secured to the inner surface of the closure 6 and surround the pins 18. The opposite or free extremities of these pins 18 are adapted to pass through openings 20 formed in ears 21, arranged on the inner periphery of the curbing 5, whereby the pins 18 serve as guides for the closure 6. The inner extremity of the screw 14 is provided with a pin 22 which passes through an opening 23, formed in the inner extremity of an inwardly projecting guide member 24. This guide member 24 is connected with the enlarged portion 12 of the bar 10 and extended inwardly therefrom.

Now by turning the screw 14 by means of the butterfly operating member 16, the closure 6 will be moved inwardly toward the frame or curbing 5 to its limit of movement represented by the dotted line position in Fig. 2. In this position the register is closed against the entrance of air or heat to the

room or auditorium. By adjusting the screw 14, the closure 6 may be regulated to admit the desired amount of air or heat or to close the same off entirely. During the adjustment of the screw 14, the closure 6 is carried with the screw 14 and the pins 18 are caused to move in the perforations 20 of the ears 21.

Now assuming that it is desired to place my register in a concrete wall or floor. It will, of course, be impossible to pass screws through the openings 9 in the ears 8 into the concrete for anchoring the register in position. But in order to effectively anchor the register in position in a concrete wall or floor, I form perforations or openings 25 in the opposite extremities of the bar 10, and through these openings or perforations, I pass anchoring rods 26, which may be secured to a transverse bar 27 bridging the ventilator opening. The anchoring rods 26, as shown in the drawings, are provided with hook-shaped extremities 28, which pass underneath the bar 27, however, it must be understood that any other desired means may be employed for securing the anchoring rods 26 to the bar 27. In fact, it may also be possible if found desirable to dispense with the bar 27 and anchor or secure the rods 26 to some other stationary part of the building.

The form of my invention illustrated in Figs. 3 and 4 is analogous and is of much similarity to the form disclosed in Figs. 1 and 2, but there are certain differences that exist between these two forms, which will now be described in connection with Figs. 3 and 4. In this form of my invention I employ a frame or curbing 29, having a flange 30 and a transverse bar 31, provided with an enlarged centrally located member 32, in which a reduced extremity or pintle 33 of a screw 34 is journaled. The opposite extremity of this screw 34 is journaled in a top or saucer shaped roof 35 by means of a reduced extremity or pintle 36, which passes centrally through the roof 35. To this pintle 36 exteriorly of the roof 35 I fixedly secure a butterfly member 37 by means of which the screw 34 may be turned. The roof 35 is supported above or beyond the frame work or curbing 29 by means of pins 38, which pins are anchored in the frame or curbing 29 as shown at 39. The opposite extremities of these pins being secured to the rim of the roof 35 as shown at 40. Between the roof 35 and the frame or curbing 29 I arrange a saucer shaped closure 40, which is provided with a centrally located threaded opening 41, through which the screw 38 passes. The periphery of this closure 40 is provided with a flange or extension 42, through which the pins 38 pass, whereby the closure 40 is held against turning. These pins 38 also serve as guides for

the closure 40. Now assuming that it is desired to close the register against the admittance of air, or heat, to the room or auditorium the operating member 37 of the screw 34, may be turned in the proper direction to cause the closure 40 to move toward the frame or curbing 29, or to the dotted line position illustrated in Fig. 4. During the turning of the screw 34, the closure 40 will be held against revolving by means of the pin 38 and the screw 34 will be caused to carry the said member to the dotted line position. This form of my invention may be secured in position in the wall or floor in a manner substantially the same as that described in connection with the form of my invention illustrated in Figs. 1 and 2 inclusive, and need not be described here in detail.

From the foregoing, it is thought that the construction and many advantages of the herein described invention will be apparent to those skilled in the art without further description and it will be understood that various changes in the size, position and minor details of construction and arrangement may be resorted to without departing from the spirit of my invention or sacrificing any of the advantages of the same.

Having thus described my invention, what I claim is:—

1. A register, comprising a frame, a closure, a screw journaled at its opposite extremities in parts of said register and connecting said closure with said frame, the register having a threaded opening intermediate the journaled extremities of said screw, the screw passing through said threaded opening and cooperating with the threads of the latter when the screw is turned for moving the closure to and from the said frame.

2. A register, comprising a frame adapted to surround the heat or ventilating opening, a closure, a screw connecting said closure with said frame, the register having parts in which the opposite extremities of said screw are journaled, the register having a threaded opening intermediate the journaled extremities of said screw, the screw passing through the said threaded opening and cooperating with the threads of the latter when the screw is turned to move the closure to and from the said frame, and guide rods connecting said closure with the frame for preventing turning of the closure.

3. A register, comprising a frame, a closure, a screw connection between said frame and the closure, one extremity of the said screw having a reduced extension, the frame having a centrally located member in which the said reduced extension of said screw is journaled, and guide rods for said closure, the said guide rods preventing turning of the said closure.

4. A register, comprising a frame adapted
to surround a heat or ventilating opening, a
closure, a screw connection between said
frame and the closure, one extremity of
5 the said screw having a reduced part, the
frame having a centrally located member
and the said reduced part of said screw be-
ing journaled in said centrally located mem-

ber and guide rods for preventing turning
of the closure.

In testimony whereof I affix my signature
in the presence of two witnesses.

JAMES T. McELFATRICK.

Witnesses:

FELIX THIES,

JNO. G. POWELL.

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