

J. S. MAKIN & H. A. SCHELLMAN.

REGISTER.

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1,056,566.

Patented Mar. 18, 1913.

Fig. 3.

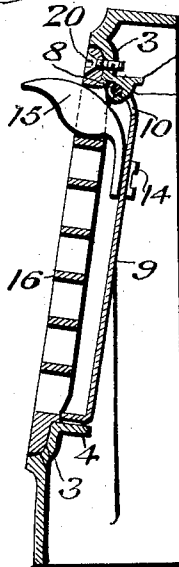


Fig. 1.

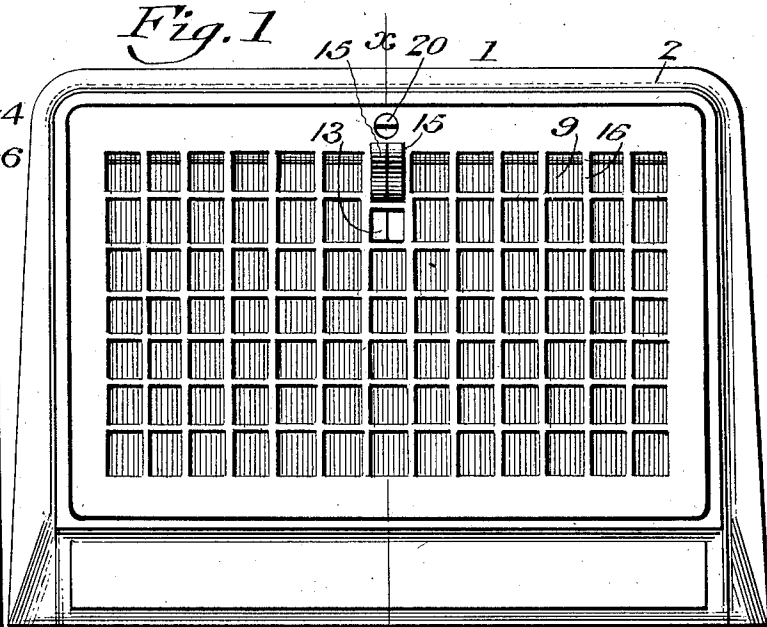


Fig. 4.

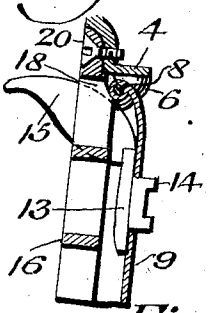


Fig. 2.

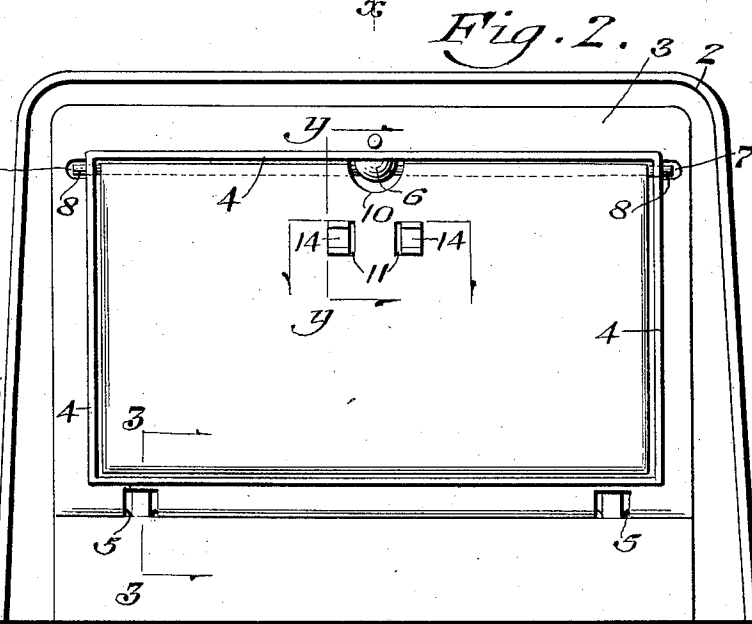


Fig. 5.

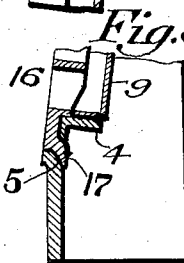


Fig. 6.

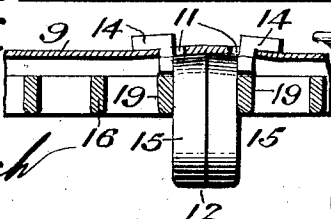


Fig. 7.



WITNESSES

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UNITED STATES PATENT OFFICE.

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REGISTER.

1,056,566.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOHN S. MAKIN and HENRY A. SCHELLMAN, citizens of the United States, both residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Register, of which the following is a specification.

Our invention relates to a new and useful register and consists of novel means for holding the damper in various positions.

It further consists of other novel features of construction all as will be hereinafter set forth.

The annexed drawings and the following description set forth in detail one mechanical form embodying the invention, such detail construction being but one of various mechanical forms in which the principle of the invention may be used.

Figure 1 represents a front elevation of a register embodying our invention. Fig. 2 represents a rear elevation thereof. Fig. 3 represents a sectional view on line $x-x$, Fig. 1. Fig. 4 represents a sectional view on line $y-y$, Fig. 2. Fig. 5 represents a sectional view on line $z-z$, Fig. 2. Fig. 6 represents a sectional view on line $A-A$, Fig. 2. Fig. 7 represents a perspective view of one of the expanding friction members in detached position.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings: 1 designates a register having a frame 2 with a damper front opening and with the wall around the opening depressed or inwardly curved, as at 3, and provided with the rib 4.

5 designates openings in lower depressed portion 3 and 6 designates a lug depending from the upper depressed portion 3.

7 designates journals formed at suitable points in the side depressed portion 3.

8 designates a rod or shaft the ends of which are adapted to be supported by the bearings 7, and connected to said rod 8 is the damper 9 formed of any suitable material and in any manner. As here shown, the upper edge of the damper is curled over the rod 8 and is cut away at 10 in order that the rod at this point may be engaged by the lug 6, which together with the bearings, hold the rod in proper position and serve as a bearing.

11 designates openings formed in the damper 9 at a suitable point therein, and suitably spaced from each other to receive the expanding friction members 12 and to provide for a spring action between the same. The said members 12 are each formed with the depending plate 13 adapted to seat on one side of the damper 9, and from this plate extends the ear 14, the front face of which is slightly inclined. Each ear is adapted to pass an opening 11 in the damper and seat on the opposite side thereof from its plate 13. Projecting forwardly from the plate 13 are the gripping arms 15.

It will be understood that the adjacent walls of the expanding friction members abut and that the ears 14 on each member project oppositely, as will be understood from Fig. 6, and by reason of the engagement of the plates 13 with the front face of the damper and the engagement of the ears 14 with the rear face of the damper, a spring action results which tends to separate the expanding friction arms 15.

16 designates the front plate or grille of the register, which is provided with the lugs 17 which are adapted to be seated in the openings 5 in the frame 2, said front plate being adapted to be seated in the depressed portion of the frame as will be evident. The said front plate is provided with an opening 18 adapted to pass or receive the two projecting expanding friction arms 15, when the same are brought together, as seen in Figs. 1 and 6, so that the tendency of the spring action is to force the side faces of the arms 15 against the side walls 19 of the opening 18, causing an expanding frictional action sufficient to hold the arms, and thus the damper, in any position to which they are moved, yet but a small amount of force is necessary in order to move the arms 15, from the exterior, in order to adjust the damper to the desired position.

The front plate 16 of the register is secured to the frame 2 by a screw 20, or screws if desired, and by reason of the relation of the bearings 7 the lug 6 and the front plate 16, the latter is caused to abut the portion of the damper 9 which surrounds the rod 8, and forces the rod into greater or less engagement with the bearings 7 and lug 6 so that by tightening or loosening the screw 20 a greater or less tension is imparted to the

damper 9 which will hold the damper in its various positions as desired.

Having thus described our invention what we claim as new and desire to secure by Letters Patent, is:—

1. In a device of the character stated, a register frame having an opening, a damper of resilient sheet material and movably supported in said register frame, and two expanding friction members formed with plates bearing against one face of the damper and with laterally projecting ears passed through openings in the damper and bearing against the opposite face of the same and also formed with expanding friction arms projecting through the opening in the register frame and forced apart to frictionally engage the sides of said opening by the resiliency of the damper.
2. In a device of the character stated, a register frame having an opening, a damper of resilient sheet material and movably supported in said register frame, and two expanding friction members formed with plates bearing against one face of the damper and with laterally projecting inclined ears passed through openings in the damper and bearing against the opposite face of the same and also formed with expanding friction arms projecting through the opening in the

register frame and forced apart to frictionally engage the sides of said opening by the resiliency of the damper.

3. In a device of the character stated, a register frame having bearings, a rod rocking in said bearings, a damper secured to said rod, a grille for the register frame and having a portion bearing against the damper and rod, and means for securing said grille in the register frame and adjusting the former to vary its frictional pressure against the damper and rod.

4. In a device of the character stated, a register frame having bearings and a lug depending in a line with the inner sides of said bearings, a rod rocking in said bearings, a damper having its upper edge curled around said rod to secure it upon the same, a grille having a portion bearing against said curled edge of the damper, and means for securing said grille to the register frame and adjusting the former to vary its frictional pressure against the curled edge of the damper and of the rod against the bearings and lug.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."