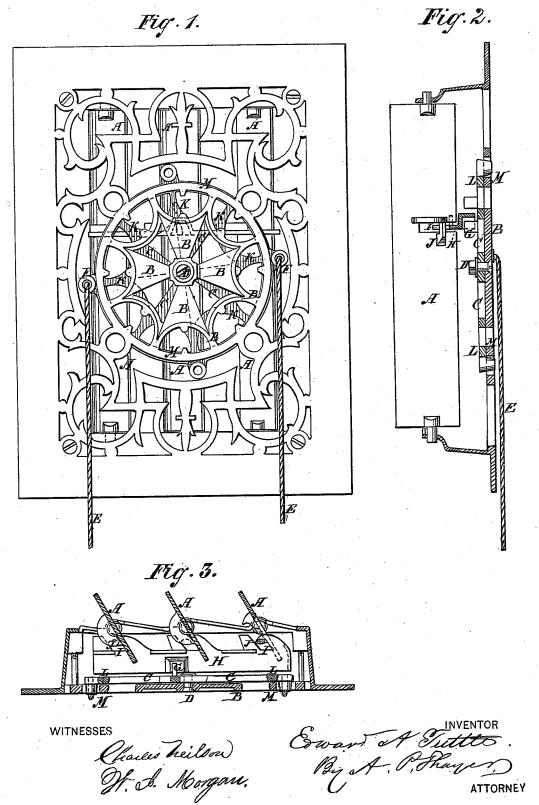
E. A. TUTTLE. Air-Register.

No. 208,350

Patented Sept. 24, 1878.



UNITED STATES PATENT OFFICE.

EDWARD A. TUTTLE, OF NEW YORK, N. Y., ASSIGNOR TO THE TUTTLE AND BAILEY MANUFACTURING COMPANY.

IMPROVEMENT IN AIR-REGISTERS.

Specification forming part of Letters Patent No. 208,350, dated September 24, 1878; application filed April 8, 1878.

To all whom it may concern:

Be it known that I, EDWARD A. TUTTLE, a resident of New York city, county and State of New York, have invented a new and useful Improvement in Air and Ventilating Registers, of which the following is a specification:
My invention consists of a fractional shut-

off or register arranged for and being connected with the valves of the ordinary register, so as to open them when it is opened and close them when it is closed, and also being so arranged in the ornamental fret-work front of the register as to show clearly to the eye, and thus indicate by its own position, the position of the valves, which are too much hidden to be seen readily. The essential advantage of it over the common lever contrivances for opening and closing the valves is that its position at once shows that of the valves—that is to say, if the fractional shut-off is closed it is suggested and known thereby that the valves are closed also, whereas the lever contrivances require the relations of the movements of the lever to the valves to be known and remembered, which most people do not do, which requires care to be taken frequently to find out the way the lever is to be moved, and at best often resulting in confusion and mistakes, and, besides, the arrangement is more symmetrical and ornamental.

Figure 1 is a front elevation of the register. Fig. 2 is a central vertical section. Fig. 3 is

a horizontal section.

A represents the valves behind the ornamental fret-work front, the central portion of which, B, forms the stationary portion of the fractional shut-off, while the revolving plate C, behind it and fitted on the center pivot D,

forms the other part, said parts B and C having the openings common to similar shuttingoff or registering contrivances, and the part C having a cord, E, attached to the projections F for operating it. A stud, G, projects from the rear side of C a suitable distance from the center to work the slide H, which in turn takes hold of the valves by its notches I and the bars J of the valves to work them.

The mode of connecting the rotating plate C to the slide and also the mode of connecting the slide to the valves may be varied at will, and, if desired, the parts B and C may be shaped and arranged to work by sliding the latter instead of rotating it.

The term "fractional shut-off" herein used refers to a fractional portion of the fret-work front, and it is so made in order that it be no larger than is necessary to make it plainly visible.

In this example the plate C has arms K, extending beyond the portion used as the shutoff to a ring, L, behind the stationary ring M of the front, which are not essential to it, and may be used or not.

Having thus described my invention, I do not claim any device merely for operating the

valves; but

What I claim, and desire to secure by Let-

ters Patent, is-

A fractional shut-off in or upon the front of a register, combined with the valves of the latter, and opening and closing in unison therewith, substantially as described.

EDWARD A. TUTTLE.

 ${f Witnesses}:$

CHARLES NEILSON, W. I. Morgan.