C. C. SHIPP.

WALL VENTILATING DUCT.

APPLICATION FILED MAR. 1, 1916.

1,204,321. Patented Nov. 7, 1916.

Fig. 1.

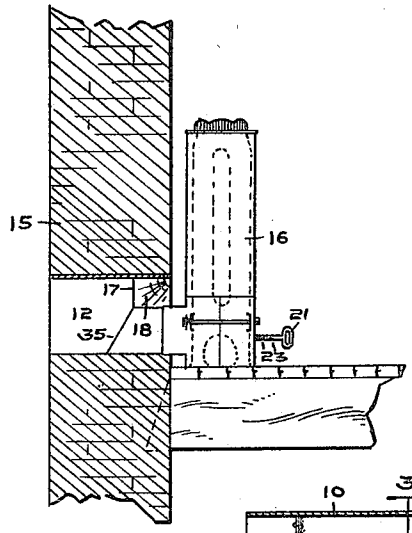


Fig. 5.

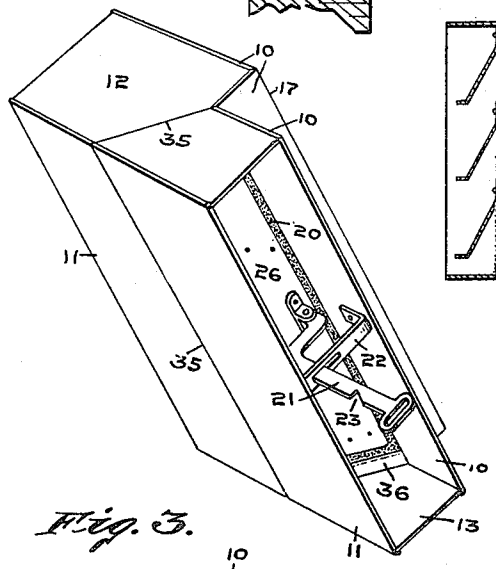


Fig. 2.

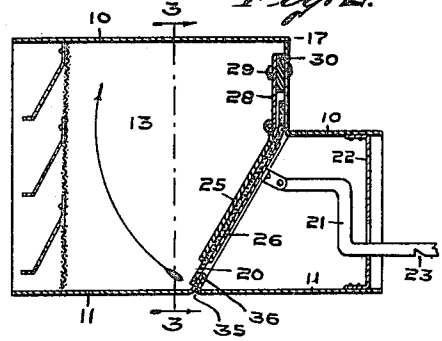


Fig. 4.

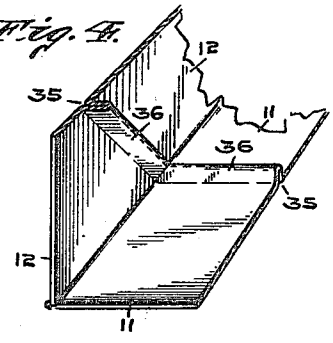
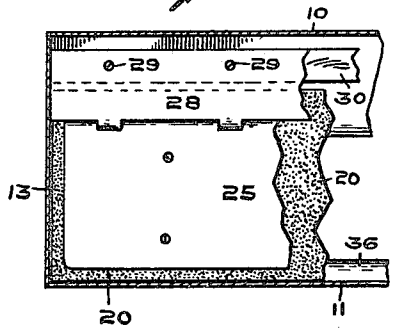


Fig. 3.



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UNITED STATES PATENT OFFICE.

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WALL-VENTILATING DUCT.

1,204,321. Specification of Letters Patent. Patented Nov. 7, 1916.

Application filed March 1, 1916. Serial No. 81,421.

To all whom it may concern:

Be it known that I, CLARENCE C. SHIPP, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wall-Ventilating Ducts, of which the following is a specification.

This invention relates to a wall ventilating duct; and the object of the invention consists in the provision of a duct of the above character which will be simple in construction, efficient in operation and cheap to manufacture.

I accomplish the objects of the invention by means of the construction illustrated in the accompanying drawings, forming a part hereof, in which—

Figure 1 is a fragmentary detail sectional view of a building wall, showing my ventilating duct in operative position in the wall, the duct communicating with a steam radiator shield. Fig. 2 is a cross section of the duct, on a considerably enlarged scale, showing the integral formation of damper stops. Fig. 3 is a fragmentary detail sectional view on the line 3—3 in Fig. 2. Fig. 4 is a fragmentary detail perspective view of an interior corner of the duct, showing the integral damper stops. Fig. 5 is a perspective view of a complete duct, showing the arrangement of the seams along the line of the damper stops.

Referring to the drawings, the duct comprises a top member 10, bottom member 11 and end members 12 and 13 which are secured together to form a hollow duct the contour of which is disclosed best in Fig. 5. This duct is placed into the wall 15 of a building and communicates with the interior of a conventional style of radiator shield 16 so that air from without the building can be admitted when desired. The duct is generally off-set as at 17 to provide room for a timber 18 for securing the baseboard across the duct. The movement of air through the duct is controlled by means of a damper 20 which is preferably composed of felt in order to effectually close the passageway through the duct when the damper is down. The damper 20 may be operated from the room by means of the shifting-rod 21 which passes through a slot in the support 22, and by means of suitably arranged notches 23 in rod 21 which engage the edge of the slot in support 22 the damper may be held in a position to limit the size of the opening through the duct. Felt 20 of the damper is rigidly held between two metal sheets 25 and 26, in which sheet 25 is hingedly secured to a plate 28 which extends parallel with the damper. Examining Fig. 3 it will be noted that felt 20 of the damper extends past the joint formed by the hinge between sheet 25 and plate 28, and to permit the felt to move freely back and forth when the damper is rocked on its hinge, the plate 28 is mounted in advance of the wall of the duct by means of a strip 30 which will impart the desired clearance for the felt. Screws 29 securely hold plate 28 and strip 30 in place against the wall of the duct.

It is desirable that the damper rest against a firm stop when down and these stops heretofore have usually been formed independently of the duct and then soldered in place along the internal surface of the duct. This construction of the damper stops has been both difficult and costly, and the stops when soldered fast are apt to become loose. To obviate the above difficulty and to not only cheapen the construction but to make a more substantial damper stop, I form the stops integrally with the bottom member 11 and end members 12 and 13. This I accomplish by giving the above members a reverse bend along the lines 35 (see Fig. 5) by which the shoulders 36 are formed. The arrangement of the shoulders 36 is clearly shown in Fig. 4 of the drawings. The shoulders thus formed are rigid and can not be displaced, and eliminates all cutting of metal in the formation of the individual strips for the stops, and all the work accompanying the soldering of the strips in place. The shoulders 36 also hold the members 11, 12 and 13 straight and true by imparting rigidity to said members. The construction of the stops is so simple that further description is deemed unnecessary.

Having thus fully described my said invention, what I desire to secure by Letters Patent, is—

1. A wall ventilating duct, square in cross section, having an inturned valve-seat formed by bending the metal of the duct

inwardly and thence outwardly, and a damper valve hinged in said duct, said damper valve being composed of pliable material adapted to rest upon said valve-seat and close the opening through said duct.

2. A wall ventilating duct, square in cross section, having an inturned valve-seat formed by bending the metal of the duct inwardly and thence outwardly, a damper valve hinged to said duct, said damper valve being composed of pliable material adapted to rest upon said valve-seat and having a loose portion extending past the damper hinge at all positions of the damper.

3. A wall ventilating duct, square in cross section, having an inturned valve-seat formed by bending the metal of the duct inwardly and thence outwardly, the bottom member of which is transversely oblique to the bottom of the duct, and the continuing side members of which are longitudinally oblique to all members of the duct, and all members arranged in a single plane.

4. A wall ventilating duct, square in cross section, having an inturned valve-seat formed by bending the metal of the duct inwardly and thence outwardly, the bottom member of which is transversely oblique to the bottom of the duct, and the continuing side members of which are longitudinally oblique to all members of the duct and all members arranged in a single plane, and a pliable damper valve hinged to said duct and adapted to contact said valve-seat and effectually close the opening through said duct.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this 25th day of February, A. D. one thousand nine hundred and sixteen.

CLARENCE C. SHIPP. [L. S.]

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