

Aug. 23, 1949.

C. T. PIEHL

2,479,773

REGISTER GRILLE

Filed May 22, 1945

Fig. 1.

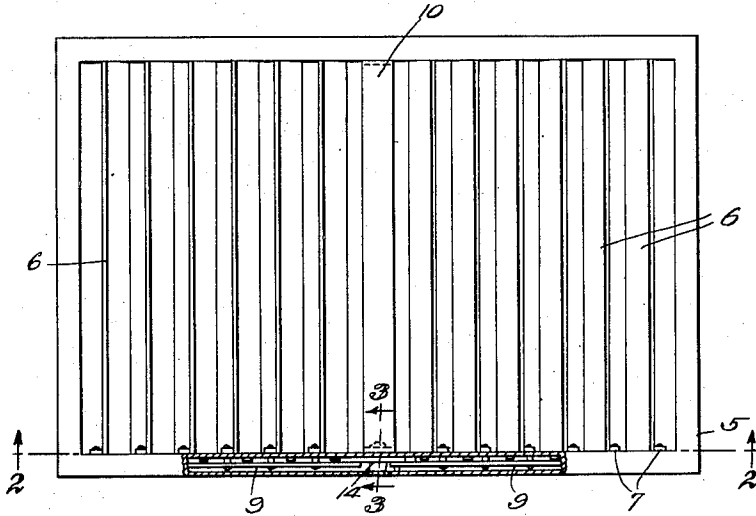
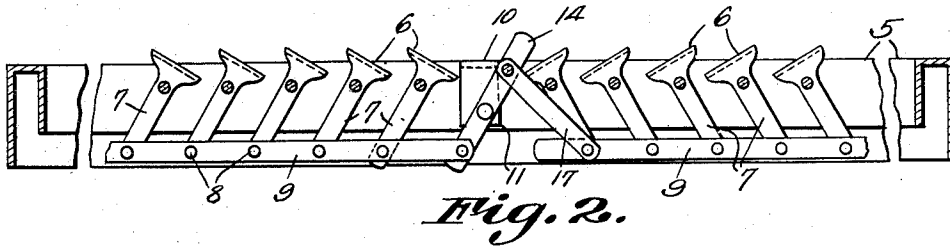


Fig. 2.

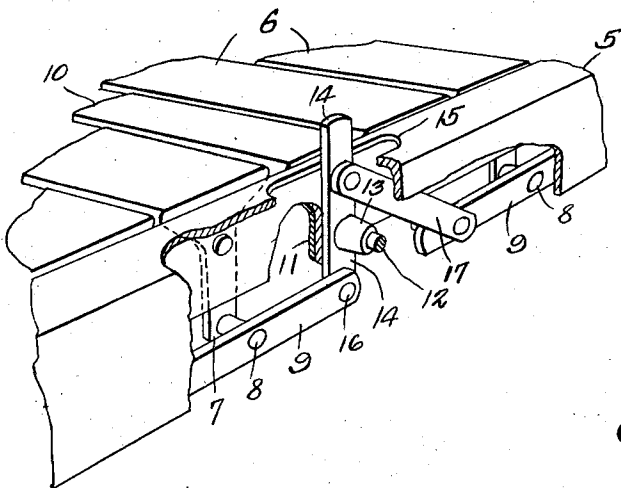


Fig. 4.

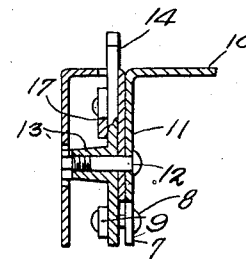


Fig. 3.

C.T. Piehl

INVENTOR.

BY

W. H. Snodgrass
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,479,773

REGISTER GRILLE

Charles T. Piehl, Batavia, N. Y.

Application May 22, 1945, Serial No. 595,179

1 Claim. (Cl. 98—110)

1

This invention relates to register grilles, and more particularly to grilles of registers forming a part of heating systems, ventilating systems or the like.

The primary object of the invention is to provide a grille wherein the air passing therethrough, will be divided and directed in opposite directions, insuring a more even distribution of the air in conditioning the air of a room.

Another object of the invention is to provide a grille of this character wherein the blades of the grille are divided into groups, the blades of each group being so connected that when the operating lever is moved to adjust the blades, the blades of the groups will be tilted in opposite directions, simultaneously.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing

Figure 1 is a plan view of a register constructed in accordance with the invention.

Figure 2 is a side elevational view of the register, a portion of one of the side bars having been cut away, illustrating the ends of the blades.

Figure 3 is a sectional view taken on line 3—3 of Fig. 1.

Figure 4 is a fragmental perspective view, a portion of one of the side bars having been broken away, illustrating the connection between the grille blades and operating bars.

Referring to the drawing in detail, the register comprises a rectangular frame 5 constructed of channel bar material, the open sides of the channel bars being disposed downwardly, as clearly shown by the drawing.

Supported by the frame, are grille blades 6 which have reduced ends 7 extended at right angles with respect to the blades proper, providing arms to pivotally connect the grille blades to the inner surfaces of the side members of the frame. Extending laterally from the free end of each reduced end or element 7, is a pin 8, which pins provide means for pivotally connecting the reduced ends 7 of the grille blades, with the operating bars 9 that are supported within the open sides of the side members of the frame. As shown, the grille blades are arranged in groups, and the blades of each group are connected with

2

an operating bar 9. The adjacent inner ends of the operating bars 9 are spaced apart, so that they may move towards or away from each other, during the operation of the grille blades.

Dividing the grille frame, at a point intermediate its ends, is a bar 10 which has downwardly extending ends 11 that are secured to the side members of the frame by means of the bolt 12 which bolt also provides a pivot for the bearing 13 of the operating lever 14 that extends upwardly through the elongated opening 15 formed in the upper surface of the angle bar forming one side of the frame. The operating bar 9 at one side of the frame, has its inner end pivotally connected with the operating lever 14, at 16, or at a point below the bolt 12, while the opposite operating bar 9 has pivotal connection with the link 17 which also has pivotal connection with the operating lever 14, at a point above the bolt 12.

Thus it will be seen that due to this construction, when the operating lever is moved to the right or left, the grille blades will be moved so that the blades of opposite groups are disposed at acute angles with respect to the upper edge of the grille frame, the blades of the groups being disposed in opposite directions.

Due to this construction, it will be seen that the blades provide deflecting plates to direct the air or heat passing through the register, in opposite directions, at opposite ends of the grille register, thereby distributing the air evenly throughout the entire area of the room.

What is claimed is:

A register of the class described, comprising a rectangular frame embodying wide side and end channel bars having their open sides disposed downwardly, the inner legs of the channel bars being shorter than the outer legs thereof, groups of wide grille blades having downwardly extending ends, pivotally connected to the inner legs of the channel bars, pivot pins secured to the free ends of the downwardly extended ends of the blades and being extended outwardly into the channel spaces of the side channel bars below the lower edges of the inner legs of the channel bars, a horizontal operating bar connected with the pivot pins of the blades of each group of blades, an operating lever pivotally mounted within the channel bar space at one side of the frame, the channel bar in which the operating lever is mounted having an opening through which the lever extends, the lever being pivotally mounted at a point intermediate the ends of the channel bar, means for pivotally connecting one end of the horizontal operating bar of one group of

blades to the operating lever at a point below the pivot of the operating lever, and a link pivotally connected to the operating bar of the opposite group of grille blades, said link being pivotally connected with the operating lever at a point above the pivot point thereof, whereby movement of the operating lever in one direction, simultaneously moves the groups of grille blades in opposite directions.

CHARLES T. PIEHL.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
671,593	Harper -----	Apr. 9, 1901
1,379,644	Menges et al. -----	May 31, 1921
1,699,020	Raleigh -----	Jan. 15, 1929
1,876,850	Burgess -----	Sept. 13, 1932
2,040,893	Young -----	May 19, 1936
2,077,175	Kornbau et al. -----	Apr. 13, 1937
2,090,908	Anderson -----	Aug. 24, 1937
2,236,865	Bailey et al. -----	Apr. 1, 1941
2,262,124	Truax -----	Nov. 11, 1941
2,303,254	Bules -----	Nov. 24, 1942
2,331,758	Barnett -----	Oct. 12, 1943
2,365,320	Young -----	Dec. 19, 1944