

March 19, 1946.

R. L. LEIGH

2,396,735

GRILLE

Filed April 19, 1944

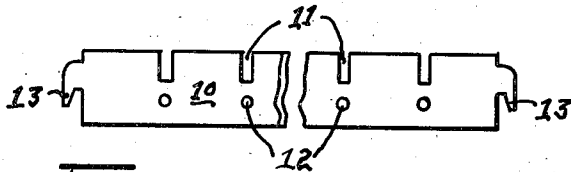


Fig. 2

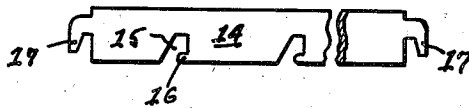


Fig. 3

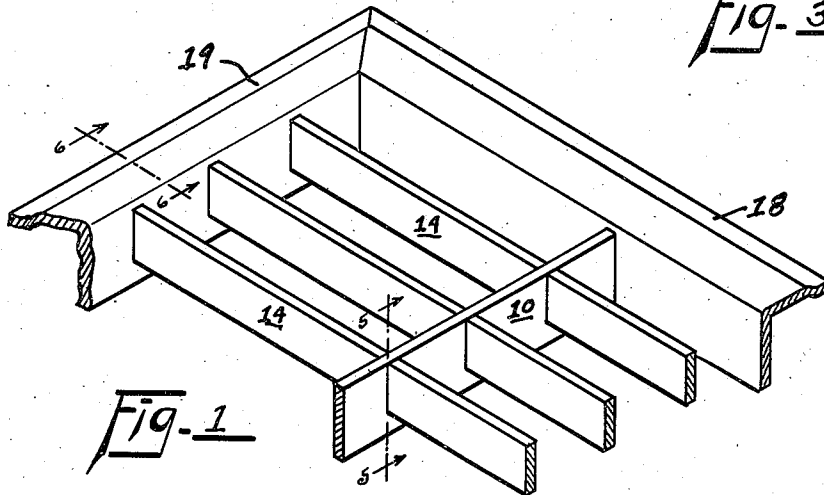


Fig. 1

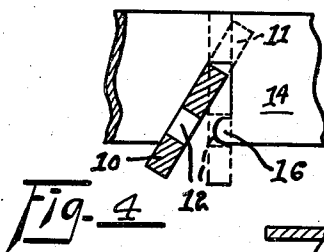


Fig. 4

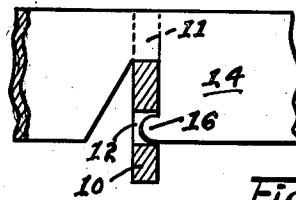


Fig. 5

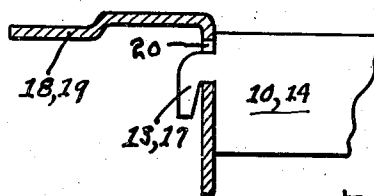


Fig. 6

Witness:
Geo. H. Chapel

Robert L. Leigh Inventor

Rice and Rice

Attorneys

UNITED STATES PATENT OFFICE

2,396,735

GRILLE

Robert L. Leigh, Grand Rapids, Mich., assignor
to Air Control Products, Inc., Coopersville,
Mich., a corporation of Michigan

Application April 19, 1944, Serial No. 531,821

2 Claims. (Cl. 189—82)

The present invention relates to grilles and more particularly to air grilles.

The primary objects of the instant invention are to provide a grille of the general character above indicated whose several transverse members may be readily and conveniently assembled; to provide such a grille whose several transverse members, when in their assembled relation, remain in a plane after installation and do not thereafter become distorted; to provide such a grille whose several transverse members, irrespective of thickness of stock, do not militate against or increase difficulties of assembly; to provide such a grille which is rigid and whose several transverse members are firmly interlocked after assembly and remain so after installation; and, to provide such a grille which is pleasing in appearance, efficient in use, and reasonably economical in manufacture and assembly.

An illustrative embodiment of the invention is shown in the accompanying drawing, wherein:

Figure 1 is a fragmentary perspective view of the grille and its frame member;

Figure 2 is a side elevational view of one of the several members of the grille proper, broken away to indicate potential differences in length of a given member;

Figure 3 is a side elevational view of one of the several transverse members of the grille itself, broken away to likewise indicate potential differences in length of any given member;

Figure 4 is a fragmentary side elevational view of one of the grille members showing in full lines an end elevational view of a transverse grille member in cross section prior to its interlocking relationship with the first member and showing in dotted lines its interlocked relationship;

Figure 5 is a view similar to Figure 4 but showing a pair of the transverse members secured in interlocked relationship; and

Figure 6 is a fragmentary view showing the manner in which all of the several transverse members are secured to their oppositely disposed frame members.

Referring then to the drawing wherein like parts of the structure shown are designated by the same numerals in the several views, a grille primarily though not specifically intended for use as a floor face air grille, comprises a plurality of spaced apart vertically disposed elongated slat members 10, preferably of stamped sheet metal, each provided with a plurality of equally spaced slots 11 along one edge thereof and below each of which slots is an aperture 12, the opposite ends

of each of which members is provided with a hook 13.

A plurality of spaced apart vertically disposed elongated slat members 14, likewise preferably of stamped sheet metal, are transversely disposed relatively to the members 10 when in assembled relation, said members 14 each having at its lower edge a plurality of equally spaced substantially inclined slots 15, each slot having an inclined wall and a vertical wall and provided at the lower end of the vertical wall with a laterally disposed lug 16 and each of which members is provided with a hook 17 on each of its opposite ends of the character of the hooks 13 on the opposite ends of the members 10.

A rectangular frame for the assembled grille comprises a pair of oppositely disposed and spaced apart angle members 18, 19, also preferably of stamped sheet metal, each oppositely disposed angle member having a series of spaced apertures 20 adapted to register with the hooks 13, 17 of the members 10, 14 respectively when in their assembled relation.

In assembling the grille of the present invention, the several members 10 are fixedly secured to the several members 14 in parallel spaced apart transverse interlocking relationship by inserting a slot 15 of a member 14 within a slot 11 of a member 10 and then rotating the member 10 toward the member 14 from its position shown in full lines in Figure 4 to its position shown in dotted lines in the same view or to its position shown in Figure 5, the lug 16 of the member 14 entering the aperture of the member 10.

After such assembly of the grille members 10, 14 as above described, the hooks 13 at each end of a given member 10 are seated within the apertures 20 of the spaced oppositely disposed angle members 18 and the hooks 17 at each end of a given member 14 are seated within the apertures 20 of the spaced oppositely disposed members 19, after which the rectangular frame 18, 19 is secured together in any suitable fashion as by spot welding if the frame is of stamped sheet metal.

It will thus be seen that the grille herein shown and described is pleasing in appearance, efficient in use and reasonably economical in manufacture and while but one specific embodiment of the invention has been herein shown and described, it will be understood that certain details of the construction shown may be altered or omitted without departing from the spirit of the invention as the same is defined by the following claims.

I claim:

1. A grille of the class described including a

slat member having a transverse slot along one edge thereof and an aperture therebelow, and a second slat member having a slot along one edge thereof with an inclined wall and a vertical wall, the open end of the slot of said second slat member having a laterally projecting lug, said second slat member being disposed transversely of the first slat member and seated in the slot of the first member and its lug interlocked within the aperture of the first member.

2. A grille of the class described including a frame comprising a pair of spaced apart frame members, each having an oppositely disposed aperture; and a second pair of transversely positioned spaced apart frame members, each having an oppositely disposed aperture; a slat member

provided with hooks at its opposite ends and having a transverse slot along one edge thereof and an aperture therebelow; and a second slat member provided with hooks at its opposite ends and having a slot along one edge thereof with an inclined wall and a vertical wall, the open end of the slot of said second slat member having a laterally projecting lug, said second slat member being disposed transversely of the first slat member and seated in the slot of the first member and its lug interlocked within the aperture of the first member, the hooks of each slat member being seated within oppositely disposed apertures of a pair of spaced apart frame members.

ROBERT L. LEIGH.