Feb. 29, 1944. F. P. PALMER 2,342,965

STACK HEAD AND SUPPORT THEREFOR

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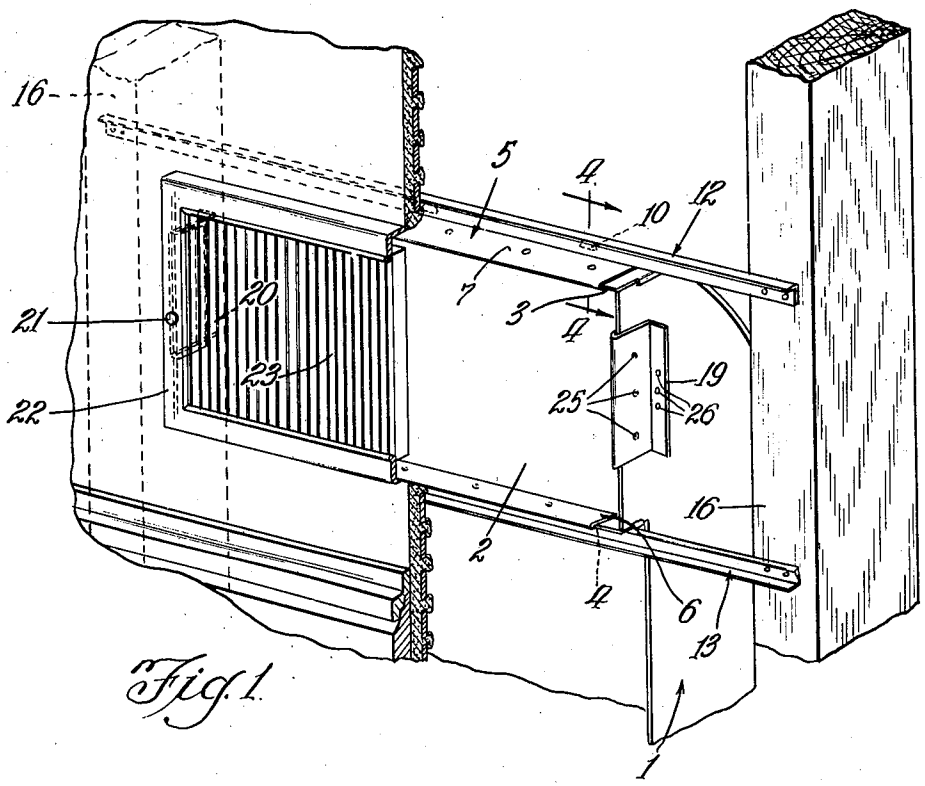


Fig. 1.

Fig. 2.

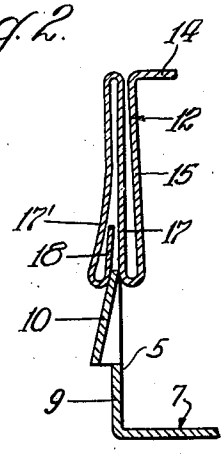


Fig. 3.

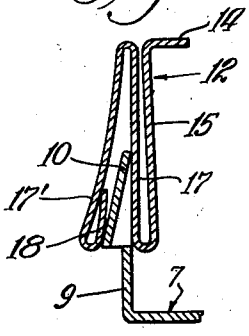
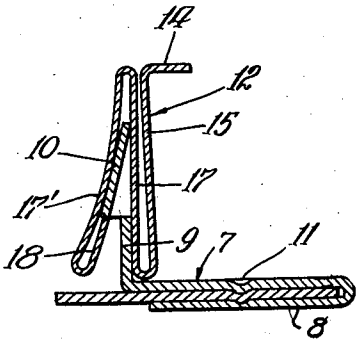


Fig. 4.



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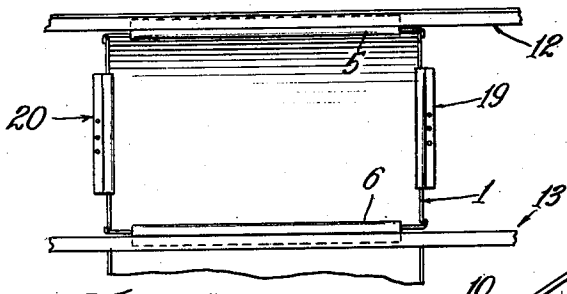


Fig. 8.

Fig. 5.

Fig. 6.

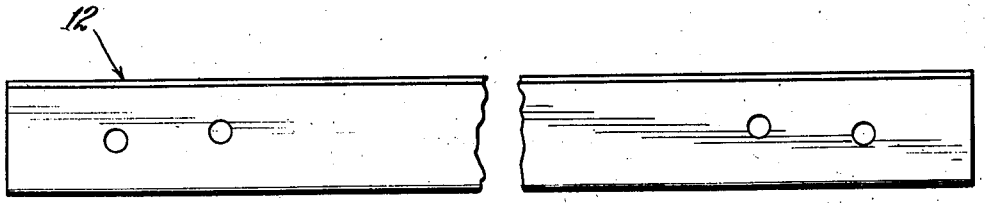


Fig. 7.

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STACK HEAD AND SUPPORT THEREFOR

Frank P. Palmer, Chicago, Ill.

Application December 9, 1940, Serial No. 369,225

3 Claims. (Cl. 98—114)

This invention relates to stack head and register supports and has, among its several objects, the provision of a self-contained stack head and register, together with supporting means therefor, which may be shipped compactly to the place of installation and there readily and conveniently installed with a minimum of effort by virtue of the head being laterally adjustable and slidable with respect to supporting strips, thus requiring no set width of stack head supporting frame and resulting in the support being readily adaptable to position the head in any desired position between wall studs.

Another object is to provide such a stack head which may be conveniently installed by virtue of the supporting strips for the head being manually attachable thereto by snap fastening means.

A further object is to provide such a stack head wherein the means for attaching the head to the supporting strips is itself conveniently attached to the head by merely sliding such means in position and securing it by causing an indentation in such means and adjacent part of the head with a nail, cold punch or the like.

A still further object of this invention is to provide such a head and supporting means wherein the parts are made substantially wholly of sheet metal.

Other and further objects of this invention will become more apparent hereinafter as the same becomes better understood from an examination of the specification and claims in conjunction with the accompanying drawings wherein:

Fig. 1 is a fragmentary perspective view, partly in section and with parts in elevation, showing a stack head and register with supporting means therefor embodying this invention;

Fig. 2 is an enlarged sectional view, corresponding to Fig. 4 but with the supporting strip about to be attached to the support connecting strip of the stack head;

Fig. 3 is a similar view with the supporting strip partly attached to the connecting strip;

Fig. 4 is a similar view with the supporting strip fully attached to the connecting strip, said figure being taken at the line 4—4 of Fig. 1;

Fig. 5 is an enlarged detail perspective view of a support connecting strip;

Fig. 6 is an enlarged detail perspective view of a sheet metal retaining lug for one of the register bolts;

Fig. 7 is a longitudinal view of one of the supporting strips;

Fig. 8 is an assembly view of the head, support connecting strips, supporting strips and lugs for the register bolts.

Referring to the drawings more particularly, reference character 1 generally designates a stack head, made of sheet metal of uniform thickness, having a rectangular cross-section and having a ninety degree bend at its upper end and a rectangular outlet 2 facing ninety degrees from the axis of the stack itself. The head 1 is provided with a flat, horizontal, transverse surface 3 above the outlet 2 and a flat, horizontal, transverse surface 4 below said outlet where said outlet projects slightly.

An elongated sheet metal support connecting strip, 5 and 6, respectively, of right angular cross-section and with one side 7 having a returned or bent back portion forming a spring edge 8 is adapted to be slipped over the upper and lower edges of the head adjacent the outlet 2 whereby the strip 5 engages surface 3 and strip 6 engages surface 4 and each of said strips may be held in position by causing indentations 11 with a cold punch, nail or the like.

The sides 9 of the support connecting strips 5 and 6 are provided with longitudinally spaced retaining lugs 10 struck from said sides for slidably receiving and retaining sheet metal supporting strips as will now be described.

These sheet metal supporting strips, designated 12 and 13, respectively, are designed for snap attachment to the respective support connecting strips 5 and 6 and are substantially of right angular cross-section, each having sides 14 and 15. The side 14 is for strength while the side 15 is for attachment to the wall studding as shown for supporting the assembled parts in adjustable position between said studding 16. The side, generally designated 15, has four overlapping parts including yieldably opening parts 16 and 17 forming a spring slot, within which to receive the side 9 of the connecting strip 5, and a relatively narrow returned edge part 18, the free edge of which is adapted to engage lugs 10 to retain the strips together as shown in Fig. 4.

Sheet metal retaining lugs 19 and 20 are provided for retaining bolts 21, the latter acting to hold a standard register 22 in position over the outlet 2. The register 22 may have the usual louvres (not shown) and fins 23 for controlling the deflection of air from said outlet.

These lugs 19 and 20 are each provided with right angular sheet metal sides, one of which has a bent back spring edge 24 which is adapted to be slipped over the right (or left) edge of the stack head at the outlet 2 and may be held in

position by causing indentations 25 with a cold punch, nail or the like. The other side of each lug is provided with suitable openings 26 for receiving and retaining the corresponding bolt 21.

From the foregoing description it will be seen that the stack head may be laterally adjusted between the studding 16 before or after attachment of strips 12 and 13 to head or studding and that such attachment may be made, both as to connecting strips 5 and 6 and said supporting strips, with the utmost of convenience and simplicity. All of said strips being of sheet metal they may be made economically and cheaply. Other advantages will be apparent without further detail.

I am aware that many changes may be made and details varied without departing from the principles of my invention and I therefore do not wish to be limited to the details shown and described.

I claim:

1. The combination of a stack head, a sheet metal supporting strip adapted to engage wall supports and a second sheet metal strip forming a slidable connection between said head and first strip permitting adjustment of the head laterally between said supports one strip having spaced lugs struck therefrom and the other strip having a plurality of parallel portions including a return edge portion, said portions providing a spring slot for the one strip with the return edge portion adapted to engage said lugs to lock the strips together.

2. The combination of a stack head, said head being of sheet metal of uniform thickness, supporting means for the head including a sheet metal strip having a longitudinal returned edge adapted to be slipped over the edge of the head at the outlet thereof and having spaced lugs struck therefrom and a second sheet metal supporting strip having a plurality of parallel portions, including a return edge portion, forming a spring slot permitting the second strip to fit over the first strip with the return edge portion on the second strip engaging said lugs to lock the strips together.

3. The combination of a stack head, a sheet metal supporting strip adapted to engage wall supports and a second sheet metal strip attached to the head, one strip having lug means struck therefrom and the other strip having four overlapping portions, providing a spring slot for the other strip and a return edge portion for engaging said lug means to lock the strips together but permitting lateral adjustment of the head between said supports.

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