Aug. 16, 1932. F. R. EAGLESFIELD 1,872,429

SHELF SUPPORT

Filed Nov. 22, 1928 2 Sheets-Sheet 1

Fig. 1.

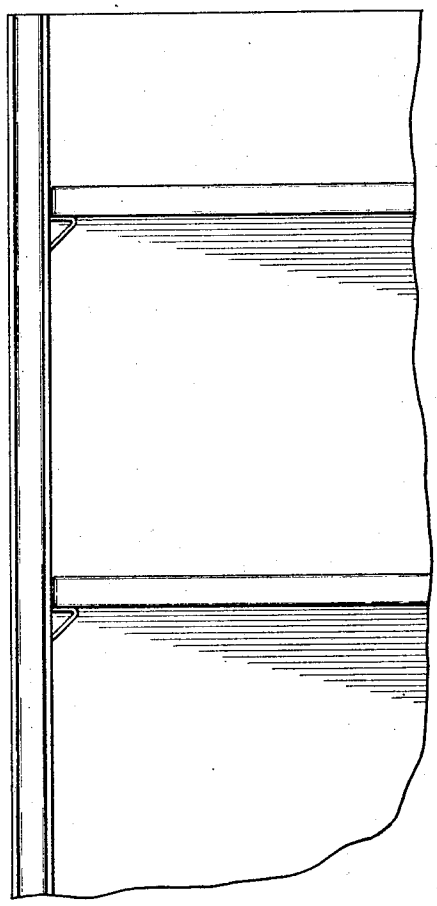


Fig. 2.

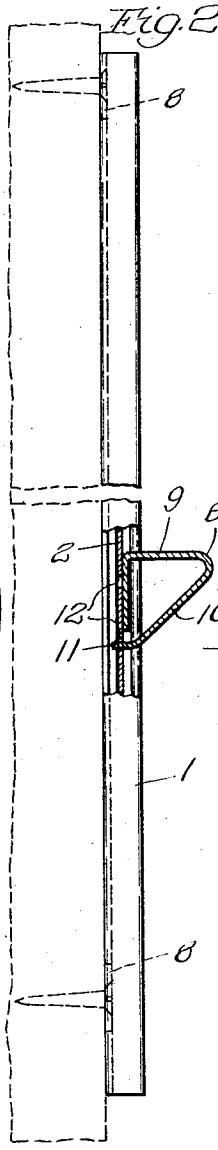


Fig. 3.

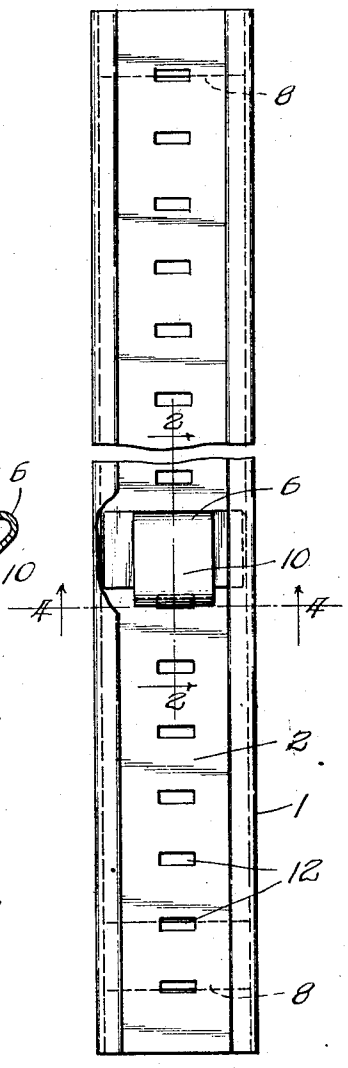


Fig. 5.

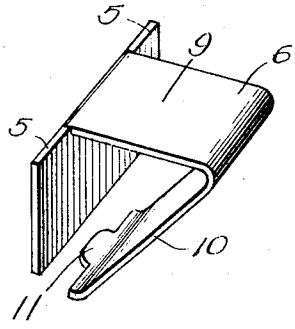
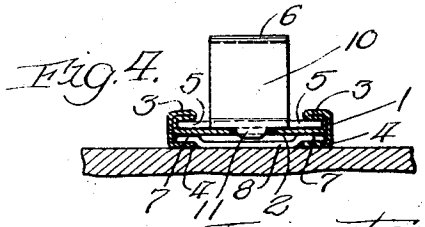


Fig. 4.



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Fig. 6.

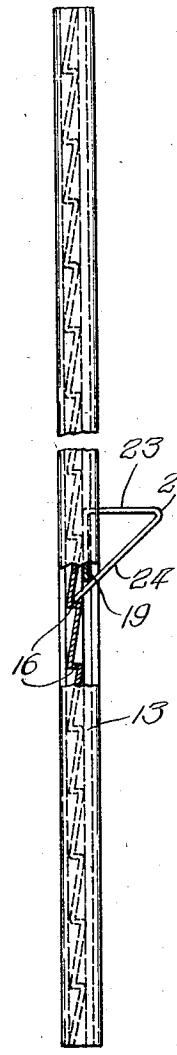


Fig. 7.

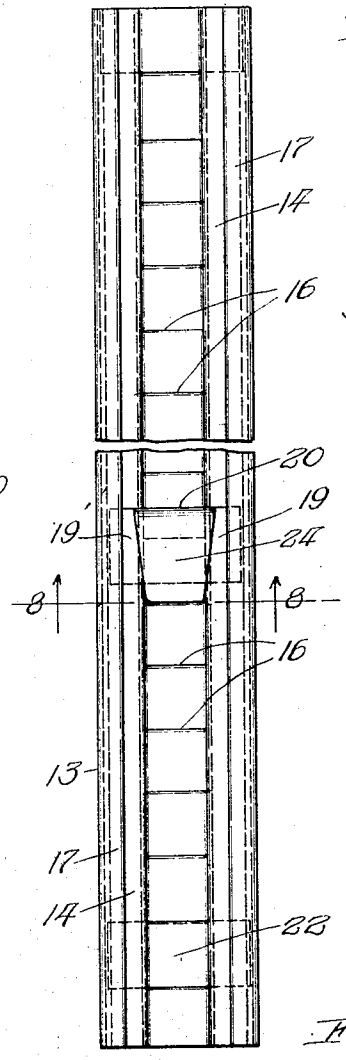


Fig. 10.

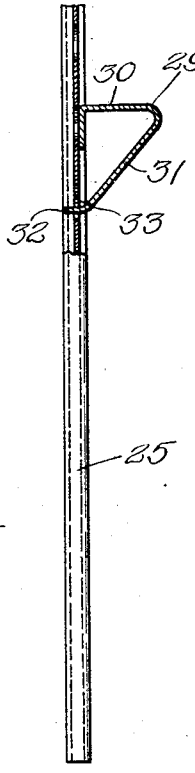


Fig. 11.

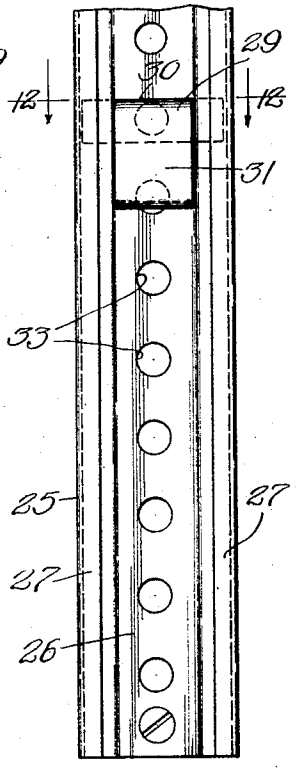


Fig. 12.

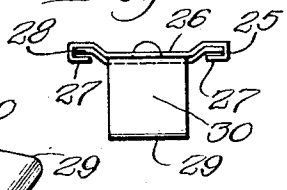


Fig. 13.

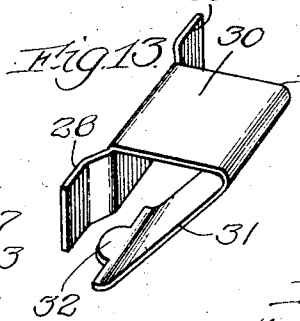


Fig. 8.

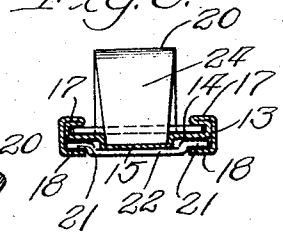
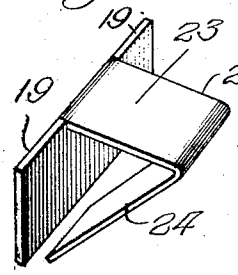


Fig. 9.



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Patented Aug. 16, 1932 1,872,429

UNITED STATES PATENT OFFICE

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SHELF SUPPORT

Application filed November 22, 1928. Serial No. 321,068.

The invention relates to improvements in shelf supports and more particularly to sliding lugs and the stripping which engages the lugs.

Among the objects of my invention is to provide a device of the above character, which is simple, durable, inexpensive, and ornamental; to provide a lug which is easily and readily slid and placed into position in the slotted stripping; further to provide a device which will positively position the shelf or other supported member in a horizontal position; to provide a device which is adapted to a variety of shelving needs; to provide a support which may be quickly screwed to the side of book cases or other compartments for books and the like; and further to provide a lug which although easily adjustable, cannot be removed or lost when the stripping is placed in position.

Other objects, advantages, capabilities and features are comprehended by the invention as will later appear, and are inherently possessed thereby.

Referring to the drawings, Fig. 1 is a view in front elevation of a portion of a book case with the shelf support attached thereto.

Fig. 2 is a view in side elevation of one of the embodiments of the shelf support attached to a wall member with parts broken away and showing in section a lug constructed and placed within the stripping in accordance with my invention.

Fig. 3 is a view in front elevation of one of the embodiments of the shelf support with parts broken away and showing in front elevation a lug constructed and placed in position in accordance with my invention.

Fig. 4 is a horizontal sectional view taken in a plane represented by line 4—4 in Fig. 3 of the drawings.

Fig. 5 is a view in perspective of a preferred embodiment of a lug to be used with the stripping shown in Fig. 3.

Figs. 6 and 10 are views in side elevation of alternative forms of the shelf support with parts broken away and showing in section means for holding the lug in position.

Figs. 7 and 11 are views in front elevation of alternative forms of the shelf support.

Fig. 8 is a horizontal sectional view taken in a plane represented by line 8—8 in Fig. 7 of the drawings.

Fig. 9 is a view in perspective of an alternative form of a lug to be used with the stripping shown in Fig. 7.

Fig. 12 is a horizontal sectional view taken in a plane represented by line 12—12 in Fig. 11 of the drawings.

Fig. 13 is a view in perspective of an alternative form of a lug to be used with the stripping shown in Fig. 11.

Referring now more in detail to the drawings of the embodiment selected to illustrate the invention as disclosed in Figs. 1–5 inclusive, 1 is a metallic stripping of substantially uniform thickness, a portion of the stripping being flat to form a central web member 2, the remainder of the stripping integral with the web member 2 being bent upon itself to form the inwardly projecting flanges 3 on the exterior and the inwardly projecting flanges 4 on the interior of the stripping 1. The legs of the exterior flanges 3 are parallel with the web 2 and are separated sufficiently to form a slot with the web 2 in which the inter-engaging flanges 5 of the lug 6 slide. The legs of the interior flanges 4 are also parallel with the web 2 and are separated sufficiently to form a slot for the inter-engaging crimped edges 7 of the metallic strips 8. These metallic wall strips 8 are of any number and are suitably spaced along the stripping and are attached to the side walls of a book-case or other compartment by means of screws or the like, the crimped edges 7 engaging the legs of the interior flanges 4 of the stripping 1 and holding the face of the legs of the interior flanges 4 flush with the side walls of the book-case when the stripping is in position.

The lug 6 is stamped or cut out of a piece of sheet metal having the flanges 5 of a thickness so as to fit conformably in and slide in the slot formed by the web 2 with the exterior inwardly projecting flanges 3. The top 9 is horizontally disposed when the lug is in position and provides a bearing surface or support for the shelf. The width of the top 9 is less than the slot formed by the ex-

terior inwardly projecting flanges 3, thus providing sufficient clearance to allow the lug to be freely and easily slid within the stripping 1.

The leg portion 10 which is of the same width as the top portion 9 is bent downwardly and inwardly and provided with a tongue 11 which engages one of the numerous openings or perforations 12, these being spaced equididistant along the entire length of the web 2 of the stripping 1.

It will be seen that the arrangement of parts form a very simple and compact device for supporting shelves. Whenever it is desired to adjust the shelf, the tongue of the lug may be disengaged from the opening or perforation in which it was placed and with a slight outward pressure applied to the leg, the lug may be moved up or down within the slots of the stripping, the tongue of the lug engaging any other opening or perforation which the operator may desire. The same may be done with the other corners of the book-case, thus providing perfect alignment and a positive positioning of the shelf in a horizontal plane.

Figs. 6, 7, 8 and 9 show an alternative form of the shelf support, 13 referring to a stripping having a central web 14, a medial or central channel-shaped portion 15, the medial or central channel shaped portion having steps 16 at intervals along the entire length of the web 14. The remainder of the stripping integral with the web 14, being bent upon itself to form the exterior and interior inwardly projecting flanges 17 and 18 respectively, the exterior flanges 17 forming a slot with the web 14 for the inter-engaging flanges 19 of the lug 20, the interior flanges forming a slot with the web 14 for the inter-engaging crimped edges 21 of the wall strips 22. These wall strips 22 are attached by screws or other suitable means to the sides of the book-case and by means of the inter-engaging crimped edges 21, hold the stripping 1 in position. The lug 20 is stamped or cut out of substantially uniform material and is provided with the flanges 19 which engage the slot formed by the web 14 and the exterior inwardly-projecting flange 17.

The top portion 23, horizontally disposed when the lug is in position, forms the bearing surface for the shelf or other supported member. The top portion is bent downwardly and inwardly to form the tapered portion 24 which engages the steps 16 to hold the lug 20 in position. The lug as in the embodiment, as disclosed in Figs. 1–5 inclusive, may be slid up or down in the stripping and may be adjusted to any height desired, insuring perfect alignment for the shelves.

Figs. 10, 11, 12 and 13 show a further alternative form of the shelf support, 25 referring to a stripping having a central channel portion 26, the edges being crimped inwardly and bent outwardly to form the channel shaped inwardly projecting portions 27. These channel shaped portions 27 form slots co-extensive with the length of the stripping in which the inter-engaging crimped flanges 28 of the lug 29 may slide. The flanges 28 of the lug 29 are crimped to correspond with the crimped surface of the stripping 25. The lug 29 may be stamped or cut out of sheet metal of substantially uniform thickness, the flange portions 28 being crimped and the top portion 30 being bent thereto to form a horizontally disposed bearing surface or support for the shelves when the lug is engaged in the stripping. The leg portion 31 is bent downwardly and inwardly and is provided with a tongue 32 which engages the circular openings 33 when the lug 29 is in position. The circular openings 33 are cut out of the central channel shaped portion 26 of the stripping 25 and are suitably spaced along the entire length of the stripping. The lug, as in the embodiment as disclosed in Figs. 1–5 inclusive, may be slid up or down in the stripping, and may be adjusted to any height desired, insuring perfect alignment for the shelves. The stripping may be attached to a bookcase or other compartments by means of the countersunk screw 34 through the web portion 26 and spaced at any suitable distance to insure rigidity.

While I have herein described and upon the drawings shown illustrative embodiments of the invention, it is to be understood that the invention is not limited thereto, but may comprehend other constructions, details, arrangements of parts and features without departing from the spirit thereof.

Having thus disclosed the invention, I claim:

1. A lug for a wall stripping having a central web and overhanging flanges, comprising a piece of sheet metal, said piece having flanges for slidably engaging the flanges of said stripping, a central shelf supporting part, and a leg portion extending downwardly and rearwardly from said supporting part and beyond the plane of said flanges and adapted to engage openings in said central web.

2. A lug for a wall stripping having a central web and overhanging flanges, comprising a piece of sheet metal, said piece having flanges for slidably engaging the flanges of said stripping, a central shelf supporting part, and a resilient leg portion extending downwardly and rearwardly from said supporting part and beyond the plane of said flanges and adapted to engage openings in said central web.

3. An adjustable shelf support comprising a stripping bent to provide a central web

part, the edges of said strip being folded to provide grooves with overhanging flanges on one side of said web part, said edges being further bent to provide grooves with overhanging flanges on the other side of said central web part, shelf supporting lugs slidable in one set of grooves, and attaching means engaging in the other set of grooves for securing said stripping to a case or compartment.

4. A lug for a wall stripping comprising a strip of sheet metal having an elongated portion and laterally extending parts at an end thereof, said elongated portion and laterally extending parts being normal one to the other to provide flanges and a shelf supporting part the outer end of said elongated portion extending downwardly and beyond the plane of said flanges to provide a leg portion for anchoring the lug in the wall stripping.

5. A lug for a wall stripping comprising a strip of sheet metal having an elongated portion and an end portion extending laterally of each edge of said elongated portion, said end portion being bent normal to said elongated portion and along the intersection therewith to provide laterally extending flanges, said elongated portion being bent to provide a leg portion extending beyond the plane of said flanges.

6. An adjustable shelf support comprising a stripping formed from a strip of sheet metal bent to provide a central web part, said part being provided with spaced openings therealong, the edges of said strip being folded to provide grooves with overhanging flanges, lugs slidable in said grooves, said lugs being formed from a substantially T-shaped piece of metal, the laterally extending parts thereof engaging in said grooves, the medial part of said piece being bent outwardly to provide a shelf supporting part, and downwardly to provide a leg portion adapted to engage with said openings.

7. An adjustable shelf support comprising a stripping formed from a strip of sheet metal bent to provide a central web part, said part being provided with spaced openings therealong, the edges of said strip being folded to provide grooves with overhanging flanges, said edges being further bent to provide grooves with overhanging flanges on the other side of said web part, lugs slidable in said first mentioned grooves, said lugs being formed from an elongated strip having laterally extending flanges adapted to engage with said grooves, said elongated portion being bent normal to said flanges to provide a shelf supporting part and downwardly to provide a leg portion extending beyond the plane of said flanges for engagement with said openings, and attaching strips engaging in the last mentioned grooves for attaching said strip to a case or compartment.

8. A lug for a wall stripping comprising a piece of metal having a central shelf supporting part, an end part normal to said central part and extending laterally thereto to provide flanges, and a leg portion extending downwardly from said central part and beyond the plane of said flanges.

9. An adjustable shelf support comprising a wall stripping having a central web and overhanging flanges, and a lug therefor comprising a piece of metal having a central shelf supporting part, an end part normal to said central part and extending laterally thereto to provide flanges adapted to engage overhanging flanges of a stripping, and a leg portion extending downwardly from said central shelf supporting part and beyond the plane of said flanges.

10. A lug for a wall stripping having a central web and overhanging flanges, comprising a piece of metal having a central shelf supporting part, an end part normal to said central part and extending laterally thereto to provide flanges adapted to engage overhanging flanges of a stripping, and a leg portion extending downwardly from said central shelf supporting part and beyond the plane of said flanges, said leg portion having an end part smaller than the remaining portions thereof for engagement with the central web of a wall stripping.

11. An adjustable shelf support comprising a stripping having a central web portion and overhanging flanges spaced therefrom, a lug slidable in said space, said lug having flanges engaging said overhanging flanges, a central shelf supporting part normal to said flanges and extending outwardly between the flanges of said stripping and having a leg portion bent rearwardly and downwardly from said shelf supporting part for engagement with said central web portion whereby to provide an anchoring means.

12. An adjustable shelf support comprising a stripping having a central web portion, flanges overhanging and spaced from both sides of the marginal portions of said central web, a lug slidable in the space on one side of said web, said lug having flanges engaging the flanges of said stripping, a central shelf supporting part normal to said flanges and extending outwardly between the flanges of said stripping, a leg portion bent downwardly from said central shelf supporting part adapted to engage said central web portion for anchoring the lug in position, and an attaching strip engaging the flanges on the other side of said stripping for holding said stripping in place.

In witness whereof, I hereunto subscribe my name to this specification.

FREDERICK R. EAGLESFIELD.