Aug. 6, 1940. E. I. DODDS 2,210,115

FURRING STRIP GRIP

Filed May 16, 1938

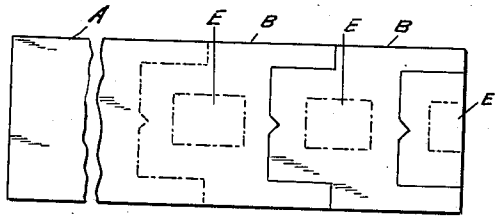


Fig. 5.

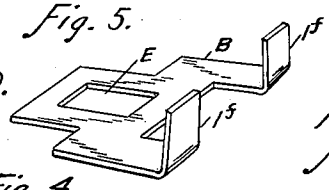


Fig. 10.

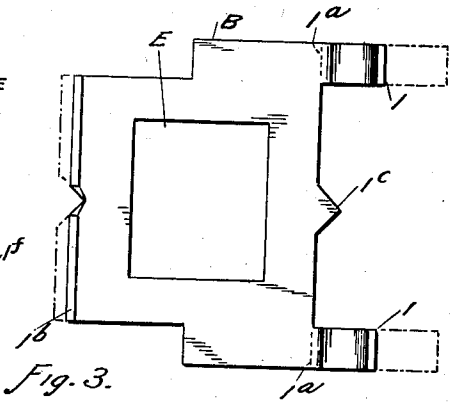
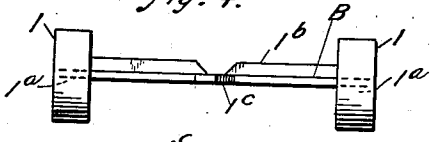


Fig. 3.

Fig. 4.



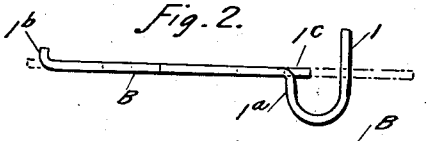


Fig. 2.

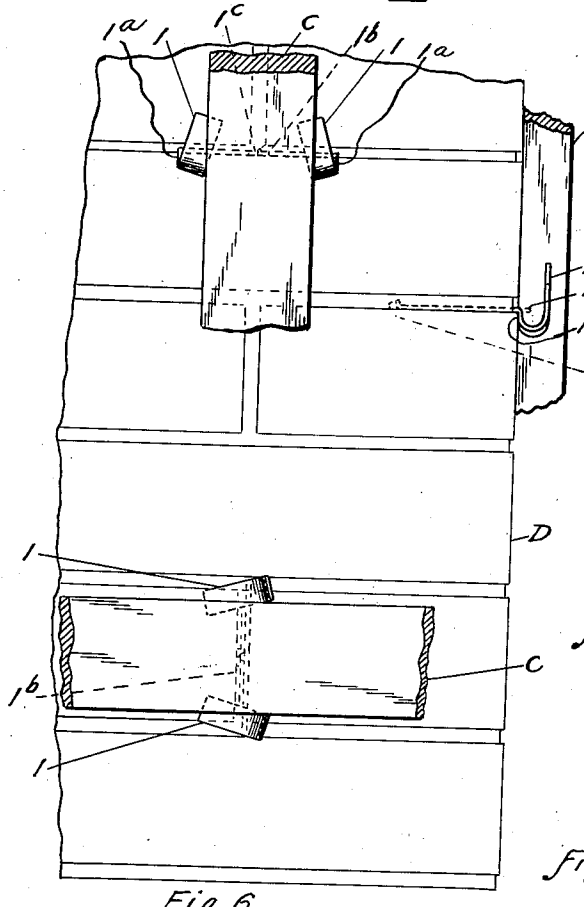


Fig. 6.

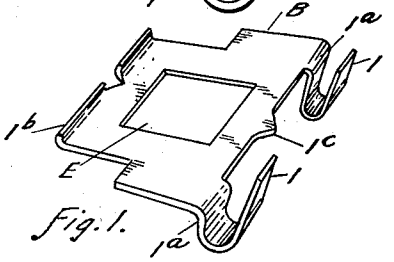


Fig. 1.

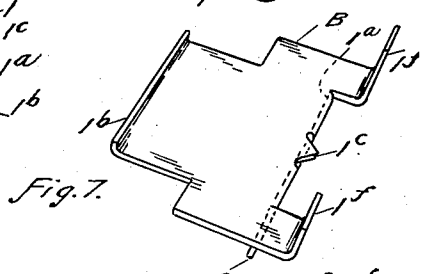


Fig. 7.

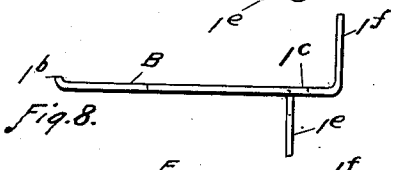


Fig. 8.

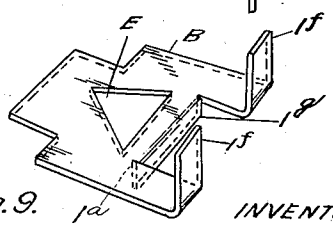


Fig. 9.

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FURRING STRIP GRIP

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Application May 16, 1938, Serial No. 208,141

8 Claims. (Cl. 72—118)

This invention relates in general to improvements in building constructions and deals, more particularly, with an improved securing arrangement comprising a clip or grip device which may be anchored to a wall structure either during the building thereof or after its completion to serve as the means by which various objects may be secured to a face of such wall structure with ease and facility.

The securing arrangement of the present invention is one of general utility and while adapted to a wide range and variety of uses, is particularly suited as a means for securing furring strips, and the like, to a brick or other masonry wall structure whereby tiling, wallboard and similar finishing surfaces may be attached to such wall structure in a minimum of time and effort.

A primary object of the invention is to provide an improved clip or grip of this character which is simple, inexpensive and easily and quickly anchored onto a wall structure of brick, stone, concrete blocks, cement work, etc., to provide a means by which various objects such as furring strips, and the like, may be secured to such wall structure with speed and economy in cost of construction.

Another object of the invention contemplates an improved form of grip or clip which is adapted to provide a strong, durable and highly efficient installation of the type described and which may be cheaply and inexpensively produced at very low cost from ordinary sheet metal strip stock with a minimum loss or waste of material.

Still another object of the invention is to provide a grip device of this character which is provided with means for readily anchoring the same onto a brick or other masonry wall structure and means for easily and quickly securing thereto an object, such as a furring strip, serving as the medium for attaching or mounting a protective facing or finishing surface on such wall structure. A more specific object in this respect is to provide such an installation in which the finishing surface is disposed in spaced relation to the adjacent face of the wall structure to provide an air space for insulation purposes, and the like.

Further objects and advantages and other new and useful features in the construction, arrangement and general combination of parts of the invention will be readily apparent to those skilled in the art as a description thereof proceeds with reference to the accompanying drawings in which like reference characters designate like parts throughout, and in which:

Fig. 1 is a perspective view of one form of the improved grip or clip of the invention;

Fig. 2 is a side view and Fig. 3 is a plan view of the grip device shown in Fig. 1;

Fig. 4 is an end elevational view of the grip shown in Fig. 2;

Fig. 5 illustrates a method of stamping the improved grip from ordinary sheet metal strip stock with a minimum loss or waste of material;

Fig. 6 shows the arrangement by which the improved grip is anchored in a brick wall structure, for example, for securing furring strips thereto in both vertical and horizontal position;

Fig. 7 is a perspective of a modified form of grip of the invention;

Fig. 8 is a side view of the clip shown in Fig. 7; and,

Figs. 9 and 10 are perspective views of further modified forms of the clip or grip of the invention.

Referring now, more particularly, to the drawing, Figs. 1–4 inclusive show one form of the improved grip or clip of the invention which may be most economically constructed from any suitable sheet metal or alloy strip stock A, Fig. 5, to produce the blanks B, which are bent by suitable forming dies to the desired type of clip or grip. Such a blank B, has the body thereof provided with a cut out area E of any selected outline or may be formed with other equivalent means by which the grip body is anchored to the wall structure. The blank body thus provided includes spaced projecting portions on its forward end and, in the form of the invention shown in Figs. 2–4 inclusive, such projecting portions are bent into substantial U-shapes, for example, in a manner to provide securing arms 1, suitably spaced from gauge surfaces or stops 1a, which serve to position the grip in the application thereof to the wall structure by engaging the adjacent face of said wall structure to limit the inward movement of the grip body with respect thereto, thus enabling the grip to be easily and quickly disposed in proper fastening position on said wall structure with said securing arms in suitable projecting relation to the outer face thereof for securing an object thereto, as presently to be described. The rear end of the blank body is bent into an anchoring flange 1b while a spur 1c is preferably provided on the edge between the spaced arms 1, to serve as a means facilitating the initial application and assembly of the furring strip or other object with the clip in holding such object in position while the arms 1 of the clip are driven into securing relation therewith.

The clip body may be made of any suitable size as may be necessary or desirable so long as the spacing of the securing arms 1 is such as to receive the object to be secured to the wall structure between the opposing inner edges of said arms, after which said arms are disposed in anchored relation with the object to secure the same in mounted position on the face of the wall structure. Thus, in the case of a furring strip C,

Fig. 6, the securing arms 1, Figs. 1, 3 and 4, are provided with an initial spacing suitable to receive the width of the furring strip between the opposing inner edges thereof; a distortion of the arms of the grip edgewise inwardly toward each other thereupon embeds said inner edges into securing relation with the adjacent sides of the furring strip substantially as shown in Fig. 6.

It will be understood that in the application and use of the grips in accordance with the present invention, as many grips as necessary are provided to be anchored onto the wall structure D, along the general path which the furring strip or other object to be secured to the wall structure extends in attached position on the face thereof. The grips as employed for securing a furring strip in vertical relation on a wall structure have their body portions disposed in the mortar space between adjacent rows of bricks as the wall is built, the same being aligned in any suitable manner. In the event the furring strips are horizontally arranged on the wall, the body portions of the grips are applied to the spaces between the ends of adjacent bricks, the same being preferably about two and one half inches wide inasmuch as standard bricks are usually two inches thick with at least one quarter of an inch of mortar on either side thereof. Of course, such dimensions are immaterial as respects walls constructed of concrete blocks, stone or cement work, while in the case of a wall already built, the grips are set in soft mortar placed in holes provided in the completed wall for such purpose, the mortar anchoring the grip in the wall on becoming hardened.

In applying a grip to a wall structure, the gauge surfaces or stops 1^a limit the inward movement thereof by engaging the adjacent outer face of the wall structure in such a manner that the securing arms 1, are disposed in proper projecting relation to said face of the wall in position for receiving the furring strip between the opposing inner edges thereof, as aforesaid. The body of the grip is anchored in the wall structure on hardening of the mortar in interlocked relation therewith through the cut out opening E and in otherwise setting around the flange 1^b, whereupon the furring strip or other object to be attached to the wall structure may then be applied to assembled relation with the arms of the grip or clip. In this respect, the furring strip is impaled upon the spur 1^c to hold the furring strip against movement in the assembled relation thereof between the opposing inner edges of the securing arms 1, preparatory to and during the operation by which said arms are distorted into anchored relation with the furring strip. Since such arms are formed of sheet metal, said inner edges are relatively sharp and the pointed corner portions of said arms are therefore readily adapted to be driven into embedded relation with the adjacent sides of the furring strip substantially as shown in Fig. 6.

With the furring strips thus secured to the wall structure, tiling, wallboard, fibre board such as Celotex, or other similar protective facing or finishing surfaces may then be nailed or otherwise secured thereto in spaced relation to the outer face of the brick or other masonry wall structure and in a manner to provide an air space for insulation purposes, etc. In a further construction, suitable wood laths, expanded metal or composition lathing may be readily secured to the furring strips whereupon the usual plaster wall finish may be provided on the lathing but with the desired air space between such lathing and the adjacent face of the brick or other masonry wall structure.

Figs. 7 and 8 show a modified form of the clip or grip in which the gauge or stop surface is defined by a flange 1^e bent from the blank between the securing arms 1^f which are provided by simple bends disposing said arms upwardly out of the plane of the blank in an opposite direction from said flange but in spaced relation thereto as determined by the thickness of the furring strip or other object to be secured. The spur 1^c is suitably formed from said flange 1^e at one end of the blank body while the opposite end is provided with an anchoring flange 1^b to provide a grip which is substantially similar in application and use to that described with reference to Figs. 1–6 inclusive. The modification of Fig. 9 is also of the same general character embodying the upturned securing arms 1^f and downwardly extending flange 1^g serving as a gauge or stop surface, while the body of the blank is provided with a cut out area E serving as an anchoring means into which the mortar may harden in interlocked relation with the grip body substantially as in the form of device shown in Fig. 1. Fig. 10 illustrates a further modification embodying the simplest form of grip or clip device of this character comprising such upturned securing arms 1^f together with the simple cut out area E serving as the anchoring means for the clip body, the gauge flange being omitted, if desired, since the same is not absolutely necessary if the grip is anchored in the wall by simple measuring to dispose the securing arms 1^f thereof in predetermined spaced relation from the adjacent face of the wall structure in accordance with the thickness of the furring strip to be secured. In an expedient procedure for applying such a grip or any of the several forms of grips to a completed brick wall or the like which is already in use, a suitable amount of mortar may be removed from the space between adjacent bricks or a hole otherwise provided in the wall structure to a proper depth for receiving the body of the grip. The hole is then filled with plaster of Paris or other suitable holding agent and the grip inserted while the plaster is soft such that when the plaster hardens the grip is properly anchored in the wall and ready for the application of the furring strip or other object to the securing arms thereof for attaching such object to the adjacent face of the wall structure substantially in the manner aforesaid.

While the invention has been described in detail with specific examples, such examples are intended as illustrations only, since it will be apparent to those skilled in the art that other modifications in the construction, arrangement and general combination of parts thereof may be devised without departing from the spirit and scope of the invention. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, with all changes falling within the scope, meaning and range of equivalency of the claims intended to be embraced therein.

What is claimed and desired to be secured by United States Letters Patent is:

1. A device for attaching a furring strip or other object to a supporting structure, said device comprising a section of sheet metal bent to provide a base and a pair of gripping arms project-

ing from said base and arranged in spaced edge-to-edge relation, said gripping arms being designed to receive between the opposed edges thereof said furring strip or other object to be attached, said base of the device being adapted to be secured to said supporting structure and said gripping arms being adapted to be distorted from their initial position by edgewise movement inwardly toward each other to positive fastening engagement with the furring strip or other object.

2. A device for attaching an object to a supporting structure, said device comprising a section of sheet metal bent to provide a substantially horizontal base and a pair of gripping arms projecting vertically from said base and arranged in spaced edge-to-edge relation, said gripping arms extending in the same general direction to one side of said base and being designed to receive said object to be attached between the opposed edges thereof, said base of the device being adapted to be secured to said supporting structure and said gripping arms being adapted to be distorted from their initial position by edgewise movement inwardly toward each other to anchored relation with said object.

3. A device for attaching an object to a supporting structure, said device comprising a section of sheet metal bent to provide a base and a pair of gripping arms projecting from said base and arranged in spaced edge-to-edge relation, said gripping arms extending in the same general direction to one side of said base and being designed to receive said object to be attached between the opposed edges thereof, said base of the device being adapted to be secured to said supporting structure and said gripping arms being adapted for edgewise movement inwardly toward each other for anchoring the opposed edges thereof in embedded relation with said object to maintain the same in fixed, rigid mounted position on said supporting structure.

4. A grip for attaching an object to a supporting structure, said grip comprising a section of sheet metal bent to provide a base and a pair of gripping arms projecting from said base and arranged in spaced edge-to-edge relation, said gripping arms extending in the same general direction to one side of said base and being designed to receive said object between the opposed edges thereof, said base of the grip having a flange projecting therefrom at a point removed from said gripping arms, said base of the grip being adapted to be secured to said supporting structure with said flange gauging the applied position thereof and said gripping arms disposed in spaced relation to the face of said supporting structure, said gripping arms being adapted for edgewise movement inwardly toward each other for anchoring the opposed edges thereof in embedded relation with said object.

5. A grip for attaching a furring strip or other object to a supporting structure, said grip comprising a section of sheet metal bent to provide a base and a pair of gripping arms having free ends projecting from said base and arranged in spaced edge-to-edge relation, said gripping arms extending in the same general direction to one side of said base and being designed to receive said furring strip or other object to be attached between the opposed edges thereof, said base of the grip having a flange projecting therefrom in a direction opposite to that which said gripping arms extend and at a point removed from said gripping arms, said base of the grip being adapted to be secured to said supporting structure with said flange gauging the applied position thereof and said gripping arms disposed in spaced relation to the face of said supporting structure, said gripping arms being adapted for edgewise movement inwardly toward each other for anchoring the opposed corner edges of the free ends thereof in embedded relation with the furring strip or other object.

6. A grip for attaching an object to a supporting structure, said grip comprising a section of sheet metal bent to provide a base and a pair of gripping arms projecting from said base and arranged in spaced edge-to-edge relation, said gripping arms being designed to receive said object between the opposed edges thereof in initial position, said base of the grip having a flange projecting therefrom and means anchoring the same in an opening in said supporting structure with said flange abutting the adjacent face thereof to gauge the position of said grip when secured to said supporting structure, said gripping arms being adapted to be distorted from their initial position by edgewise movement inwardly toward each other to anchoring relation with said object.

7. A grip for attaching a furring strip or other object to a supporting structure, said grip comprising a section of sheet metal bent to provide a base and a pair of gripping arms projecting from said base and arranged in spaced edge-to-edge relation, said gripping arms extending in the same general direction to one side of said base and being designed to receive said furring strip or other object to be attached between the opposed edges thereof, said base of the grip having a flange projecting therefrom and means anchoring the same in an opening in said supporting structure with said flange abutting the adjacent face thereof to gauge the position of said grip when secured to said supporting structure, said gripping arms being adapted for edgewise movement inwardly toward each other for anchoring the opposed edges thereof in embedded relation with the furring strip or other object to maintain the same in fixed, rigid mounted position on said supporting structure.

8. A grip for attaching a furring strip or other object to a supporting structure, said grip comprising a section of sheet metal bent to provide a base and a pair of gripping arms projecting from said base and arranged in spaced edge-to-edge relation, said gripping arms extending in the same general direction to one side of said base and being designed to receive said furring strip or other object to be attached between the opposed edges thereof, said base of the grip being provided with anchoring means and having a flange projecting therefrom in a direction opposite to that which said gripping arms extend and at a point removed from said gripping arms, the base of said grip being adapted to be secured in anchored relation in an opening in said supporting structure by said anchoring means with said flange thereon gauging the applied position thereof and disposing said gripping arms in spaced relation to the face of said supporting structure, said gripping arms being adapted for edgewise movement inwardly toward each other for anchoring the opposed edges thereof in embedded relation with the furring strip or other object.

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