March 1, 1932. J. W. PEARCE 1,847,360

RETAINING CLIP

Filed May 26, 1930

FIG. 1

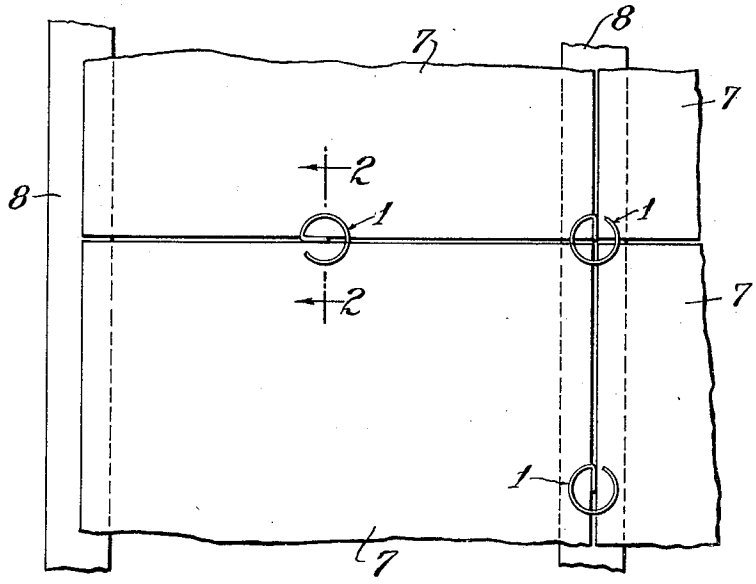



FIG. 5

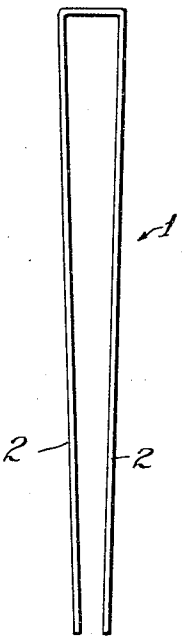



FIG. 3

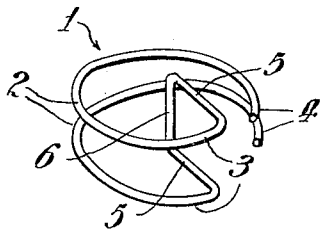



FIG. 6.

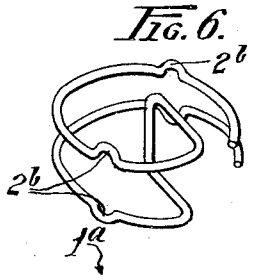



FIG. 4.

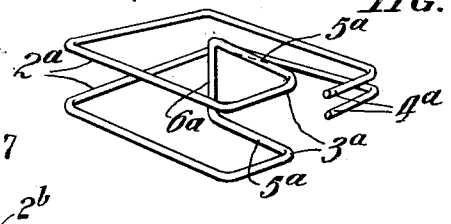
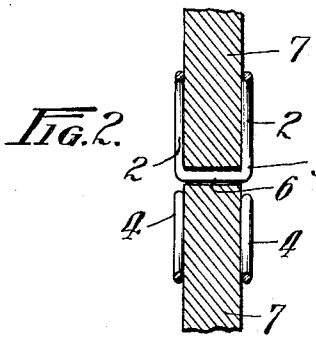



FIG. 2.



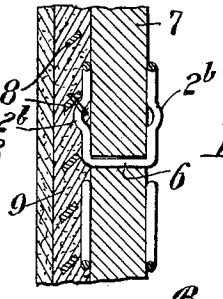




FIG. 7.

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Patented Mar. 1, 1932

1,847,360

# UNITED STATES PATENT OFFICE

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## RETAINING CLIP

Application filed May 26, 1930. Serial No. 455,504.

This invention relates to improvements in retaining clips and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

Plaster boards and like sheets used in wall constructions are either nailed to wooden studding of the wall or are clipped or tied to steel studding. As such studdings are usually erected on sixteen inch or wider centers, the plaster boards or like sheet have a tendency to bulge or spring at their adjacent margins, there usually being a small space left between the edges of adjacent boards or sheets.

The primary object of the invention is to provide a simple and efficient clip, which can be readily made for securing marginal parts of adjacent sheets together to hold them in the same plane, which clips may be readily placed in position without the aid of any special tools or extraneous fastening devices.

A further object of the invention is to provide a clip of this kind which is practical to make from wire, whereby the same can be produced at low cost and without waste of the wire so used.

Another object of the invention is to provide a device of this kind comprising a pair of axially spaced loops, each including at one end inwardly extending, connected together arms, the loops being formed to gradually approach each other from said arms toward the other and free end of the loops, to cause said loops to effectively grip upon the marginal portions of adjacent sheet like wall members with which they are engaged.

Another object of the invention is to provide a clip of this kind which when it is enclosed by the usual plaster coats, will provide keys therefor whereby better plaster adherence is possible upon the wall forming sheets.

Still a further object of the invention is to so form the clip that it may be employed to support the usual open mesh metallic reinforcing strips employed in connection with the joints between adjacent wall sheets.

These objects of the invention, as well as others, together with many advantages thereof, will more fully appear as I proceed with my specification.

In the drawings:—

Fig. 1 is a view in elevation of a number of wall board sheets as when engaged upon associated wall studdings, with my improved clips in position with respect to marginal portions of said sheets to hold them against relative springing or bulging.

Fig. 2 is a vertical sectional detail view on an enlarged scale as taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of one form of clip embodying my invention.

Fig. 4 is a perspective view of a modified form of clip embodying my invention.

Fig. 5 is a view in elevation showing a hairpin like piece of wire from which my improved clip is readily formed.

Fig. 6 is a perspective view of a further modified form of clip similar to the one such as is shown in Fig. 2, and formed with plaster keying humps or projections, some of which may be readily employed to support open mesh reinforcing strips sometimes used at the joints between adjacent wall sheets.

Fig. 7 is a view similar to Fig. 2 showing the clip of Fig. 6, as when employed to support the joint reinforcing strips and as covered by the usual wall plaster and acting to more effectively key the same to said wall sheets.

Referring now in detail to that embodiment of the invention illustrated in Figs. 1, 2, 3 and 5 of the drawings, 1 indicates as a whole one form of my improved clip which is preferably but not necessarily made of wire. Said clip comprises a pair of axially spaced loops 2—2 each of which as herein shown is substantially circular although they can be of other different shapes as will later appear. Each loop is an open loop and includes ends 3 and 4 respectively and integral with each end 3 is an inwardly extending arm 5. The arms 5—5 of both loops are connected together at a point substantially axially of said loops by a member 6. The loops 2—2 are formed as oppositely disposed helixes; that is, they are spaced further apart at the arm ends 3—3 than they are at their free ends

4—4 as best shown in Fig. 3. Thus when the free ends of the loops are separated or sprung apart, in the plane of the axis of the device, they act to return to their normally closely spaced relation and thus will exert a clamping action upon any member interposed between them.

At Fig. 1, I have illustrated the device as in use between marginal portions of wall board sheets 7—7 mounted on studding 8. At the left hand end of said figure, a device is illustrated as operatively positioned between the horizontal margins of adjacent sheets 7—7 while at the right hand end of said figure, in one instance, one of said devices is operatively positioned to secure four corner portions of adjacent sheets together and in another instance, said device is employed between the vertical margins of adjacent sheets for the same purpose.

In applying the device in place, after the wall sheets are disposed upon the studding, a portion of one of the loops 2 near that end 3 to which the associated arm is connected, is inserted into and through the space between adjacent sheets until the connecting member 6 is engaged with the edges of the sheets, after which the device is turned about said member 6 as an axis to bring the loops, one upon each side of the margins of adjacent sheets. As the free ends of the loops normally act to approach each other and as they are spaced apart, a distance less than the thickness of said sheets, it is apparent that the loops will exert a gripping action upon both margins of said sheets to hold them in the same plane.

Where the edges of the wall sheets are abutted closely with each other, it is only necessary to make a small dent in the adjacent sheet margins to receive the connecting member 6.

In Fig. 4, I have illustrated a modified form of clip $1^a$ in that the loops $2^a$—$2^a$ thereof are rectangular in shape instead of circular as in Fig. 3. This arrangement shows that any desirable shape may be given the loops without departing from the spirit of the invention. In this Fig. 4, those parts corresponding to like parts in Fig. 3, bear the same reference numeral together with the superfix "*a*".

In Fig. 6, I have illustrated a modified form of clip such as shown in Fig. 3 wherein the loops 2—2 are each provided with diametrically opposite humps $2^b$—$2^b$. When such a clip is used in connection with adjacent wall sheets 7—7 and it is desired to provide plaster reinforcing means 8 such as expanded metal strips at the joints between said sheets, such strips may be tied to such humps in any suitable manner. When the coat or coats of plaster 9 are applied to one face of said wall sheets, the plaster gets behind the humps $2^b$—$2^b$ to provide effective retaining keys, for the plaster as well as a reinforcement for the same.

As before stated, the clip is preferably but not necessarily made of wire and when so made of wire, I find that wire approximating $\frac{3}{32}''$ in diameter is well adapted for all purposes desired in the clip. Clips made of wire of this diameter especially when provided with the humps shown in Fig. 6, are well adapted for plaster keying properties.

The device is simple in construction and may be produced from wire at a low cost. It may be easily inserted in place and is efficient in use for its intended purpose.

While in describing my invention, I have referred in detail to the form and arrangement of the parts thereof, the same is to be considered merely as illustrative, so that I do not wish to be limited thereto except as may be specifically set forth in the appended claims.

I claim as my invention:—

1. A clip of the kind described comprising a pair of axially spaced loops each having ends, one end of each loop being formed with an inwardly extending arm which arms are connected together at a point substantially in the center of said loops, the other end of said loops terminating substantially adjacent the first mentioned ends thereof.

2. A clip of the kind described comprising a pair of axially spaced loops each having ends, one end of each loop being formed with a radially extending arm, a central connecting member joining said arms substantially in the center of the axis of said loops, the other ends of said loops being spaced closer together than are the portions of the loop adjacent said arms.

3. A clip of the kind described comprising a pair of axially spaced loops each having ends, one end of each loop being formed with an inwardly extending arm, which arms are connected together in substantially the center of said loops and said loops being spaced the greatest distance apart where the arms are connected together and gradually approaching each other to be closest together at the free ends of said loops.

4. A clip for holding marginal portions of adjacent wall members in position comprising a pair of axially spaced loops adapted to engage opposite sides of the marginal portions of the wall members each loop including an inwardly extending arm which terminates substantially at the center of said loops and there connected together by a central member passing between the edges of said wall member, the free ends of the loops being normally closer together than their other ends and acting to approach each other and thus causing said loops to grip upon said marginal portions of said wall members.

5. A clip to hold in position adjacent wall forming sheets and a coating of plaster with

an open mesh reinforcing member in the plaster covering the joint between adjacent margins of said sheets, said clip comprising a pair of connected together loops adapted to engage opposite sides of the margins of said adjacent wall forming sheets to hold them together in substantially the same plane, one of said loops being embedded in said coating of plaster and having retaining keys for interlocking with the open mesh reinforcing member.

6. A clip of the kind described comprising a pair of axially spaced loops, each including an outwardly extending arm, which arms are connected together at a point substantially in the center of said loops, one of said loops being deformed to provide plaster retaining keys when said loop is embedded in plaster upon a wall.

7. A clip of the kind described comprising a central connecting member, a pair of arms extending therefrom and a loop extending from the outer portion of each arm around but remote from said central member, said loop terminating in proximity to its beginning point at said arm.

8. A clip comprising a central connecting member, a pair of arms extending therefrom in the same plane, a loop extending from the outer end of each arm and extending around said central connecting member but remote therefrom, said loops each terminating in proximity to where it joins said arms.

In testimony whereof, I have hereunto set my hand, this 21st day of May, 1930.

JAMES W. PEARCE.