March 11, 1952 D. D. TYSON 2,588,673

ALIGNMENT CLIP

Filed July 8, 1948 2 SHEETS—SHEET 1

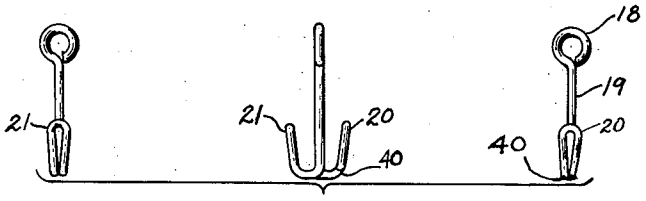


Fig. 1

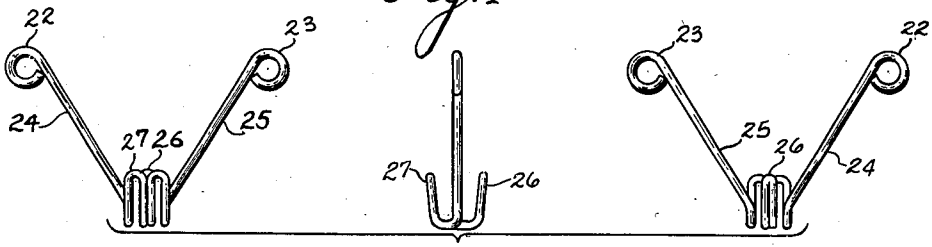


Fig. 2

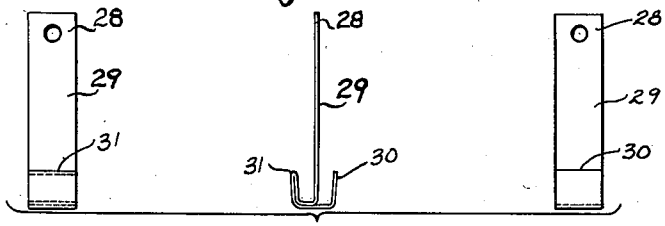


Fig. 3

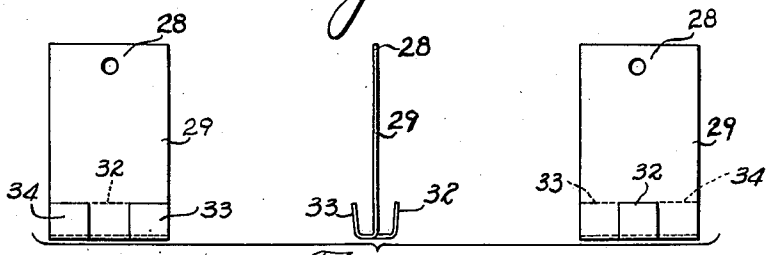


Fig. 4

INVENTOR.
DANIEL D. TYSON
BY
Woodling and Kroat
attys.

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ALIGNMENT CLIP

Filed July 8, 1948 2 SHEETS—SHEET 2

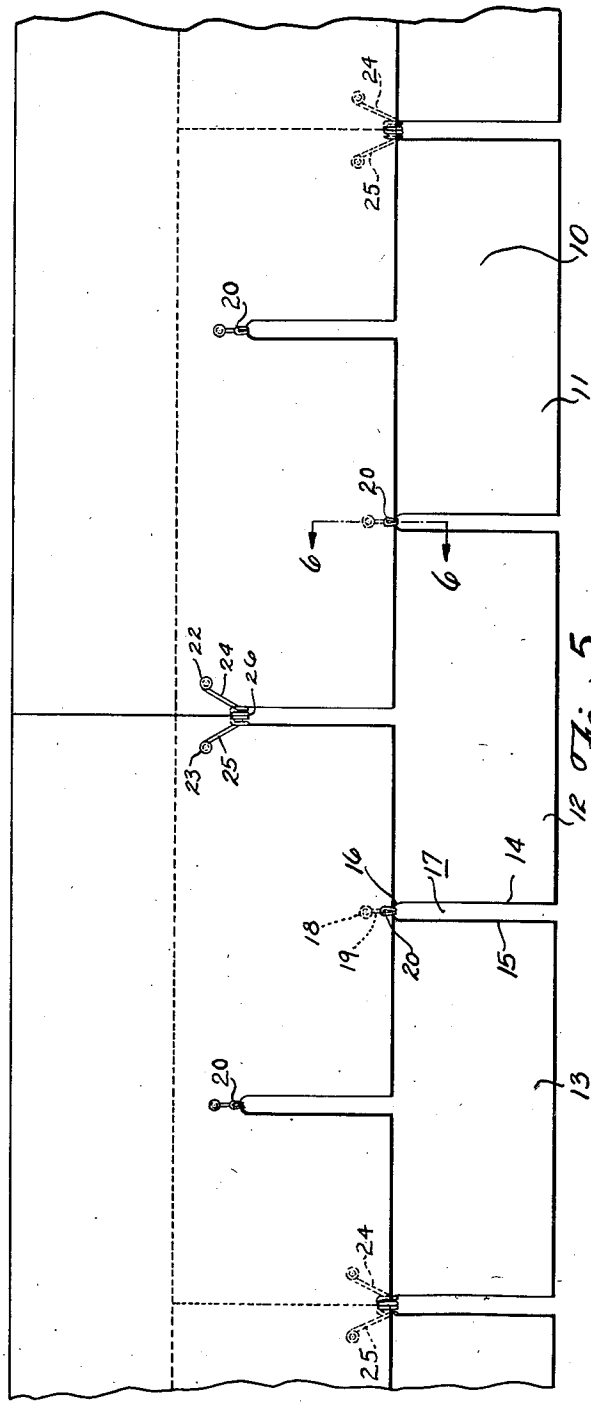


Fig. 5

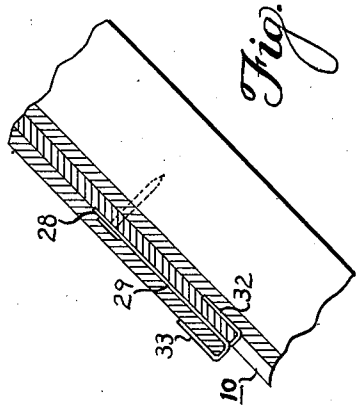


Fig. 7

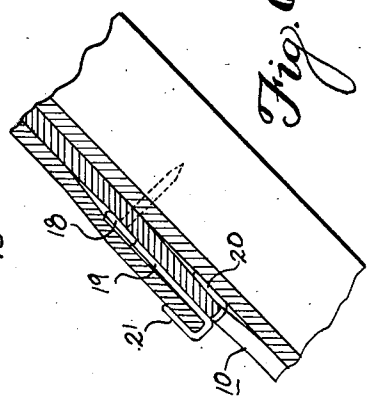


Fig. 6

INVENTOR.
DANIEL D. TYSON
BY
Hoodling and Kroat
attys

Patented Mar. 11, 1952

2,588,673

UNITED STATES PATENT OFFICE

2,588,673

ALIGNMENT CLIP

Daniel D. Tyson, Mansfield, Ohio

Application July 8, 1948, Serial No. 37,655

6 Claims. (Cl. 108—33)

1

This invention relates in general to devices for the building trades, but relates more particularly to means for aligning and securing shingles upon a roof or against a siding.

Many designers and inventors have developed special forms of shingles and fasteners for the shingles. Others have developed holders for slate and wooden shingles. In each instance, the shingle has been of some special form, and the fastener has been solely for that special shingle. Only one or two inventors have developed any type of clip or fastener for use with the common slotted shingle used on the majority of modern homes. Even this limited development has not provided anything of sufficient usefulness and attractiveness to come in demand to any extent.

An object of this invention is to provide an alignment clip for shingles having edges defining a transverse slot therein with two parallel sides and a terminus end, the slot extending from the lower side of the shingle and terminating inwardly thereof.

Another object of this invention is to provide an alignment clip adapted to hook under the end of a slot in a shingle, and to present an upwardly extending hook to serve a two-fold purpose of anchoring another shingle and aligning the courses of shingles as the roof is shingled.

A further object of this invention is to provide an alignment clip which may be secured as the shingles are secured, without additional nails.

Still another object of this invention is to provide anchoring means for slotted shingles wherein the anchoring means is adapted to clip the lower edge of a shingle in one course of shingles to the upper end of a slot in a shingle in the next preceding course of shingles.

Other objects and a fuller understanding of the invention may be had by referring to the following description and claims, taken in conjunction with the accompanying drawings, in which:

Figure 1 is the preferred embodiment of the invention illustrated in front, side and back views, reading from left to right;

Figure 2 is a modified form of the invention for use at joining edges of two shingles, illustrated in front, side and back views, reading from left to right;

Figure 3 is a modified form of the preferred embodiment, illustrated in front, side and back views, reading from left to right;

Figure 4 is a still further modification of the invention, illustrated in front, side and back views, reading from left to right;

Figure 5 illustrates several shingles in their relative positions upon a roof, with the alignment clips of Figures 1 and 2 in place therewith;

Figure 6 is a sectional view along line 6—6 of Figure 5; and

Figure 7 is a sectional view similar to Figure 6 illustrating the modified form of Figure 4 in a cross section of the shingles.

In the drawings, the preferred embodiments of the invention are illustrated. These embodiments actually have been tested and found to be the most satisfactory embodiments of the invention, although undoubtedly, they do not represent every variation which may be possible, or even in some cases, desirable. These modifications are set forth merely to illustrate the invention.

In Figure 1 of the drawings, a single alignment hook made of wire is illustrated. This hook comprises an anchor portion 18, a stem 19, a first hook 20 and a second hook 21. The actual construction of the alignment clip is readily ascertainable from the drawings. The anchor portion 18 is a small loop through which the roofing nail may be extended. The stem 19 is a single strand of the wire of any suitable length. The wire is extended from the stem 19 and looped back toward the stem 19 a suitable distance, and then reversed in direction back to the opposite side of the stem 19, where it is again extended in a small loop back in the direction of the stem 19 where it terminates. The hook 20 is looped, as illustrated, to present a rounded surface where it is bent back upon itself and thereby prevent snagging and catching into the shingles.

The embodiment of the invention illustrated in the Figure 2 is substantially the same in construction as that illustrated in the Figure 1, except that two anchor portions 22 and 23 constituting the first and second anchor portions, respectively, of the embodiment of Figure 2, and two stem portions 24 and 25 are provided. Two hook portions 26 and 27 are provided by looping the wire back upon itself. The hook portion 27 comprises two loops and the hook portion 26 comprises one loop.

In Figure 3, a still further modified embodiment of the invention is illustrated as being made of flat sheet metal. This embodiment includes an anchor portion 28, a stem portion 29, and a first and second hook portion 30 and 31. The embodiment of Figure 3 closely resembles the embodiment of Figure 1, except that flat sheet metal rather than wire is employed.

The embodiment of the invention illustrated in Figure 4 comprises flat sheet metal, but rather

than having one hook portion on either side as illustrated in the Figure 3, the embodiment of the Figure 4 is provided with a hook portion 32 on one side of the stem portion, and two hook portions 33 and 34 on the other side of the stem portion. Thus, a stronger anchoring effect may be obtained by the double hooking action provided by hooks 33 and 34.

In the Figure 5 of the drawing, a section of roofing is illustrated. In this section of roofing illustrated, the reference character 10 indicates individual shingles having leaves 11, 12 and 13 constituting the lower side, or the weather side of the shingle. Each shingle 10 is transversely slotted as indicated by the reference character 17. The slots 17 are defined by slot edges 14, 15 and 16, the slot edge 16 actually being the internal terminus of the slot 17.

Prior to this invention, there has been a certain amount of activity in production of square and odd-shaped shingles for house siding, and brackets of various sorts to mount such shingles. No one has developed any practical and successful method of clipping down the leaves 11, 12 and 13 of the shingles, nor has anyone developed a successful method of eliminating the necessity of individually fitting and positioning each shingle upon the roof. This operation is slow, and at best lacks perfection because of human errors. This invention pertains particularly to the type of shingle illustrated by the reference character 10; it is the rectangular shingle having the slot 17 as described. This shingle is used almost universally in the United States for home and barn roofing. Ordinarily, prior to this invention, a roofer would lay one course of shingles along the edge of a roof and thereafter measure an appropriate distance upwardly and position the next course of shingles. The individual shingles of each course are staggered relative to their edge line in order to prevent the formation of a continuous crack up the roof. The staggered effect of the shingles is well illustrated in the Figure 5. It will be noted also, that the end of each individual shingle is formed with a portion of a slot 17 in order that abutment of two such shingles end to end, as illustrated in the Figure 5, will form a slot area exactly like the actual slot 17 cut in the body of each individual shingle.

The roofer, in applying a roof and using the improved alignment clip method as provided by this invention, first will apply a course of shingles along the edge of a roof in the customary manner. However, instead of merely placing a nail in the region just past the end of the terminus of slot 17, one of the alignment clips of this invention, for example the embodiment illustrated in Figure 1 and shown in actual use in the Figure 5, is selected and held against the shingle by placing the nail through the loop in anchor portion 18 and thereafter driving the nail tight in the usual manner. Before driving the nail tight, however, the roofer inserts one of the hooks 20 or 21, and it does not matter which of the hooks he selects, under the end of the slot 17 around the edge 16. This condition is illustrated best in the Figure 6, wherein it will be seen that the hook portion 20 extends around the edge 16 and back under the body of the shingle 10.

The roofer will place the embodiment illustrated in the Figure 1 at the end of the two slots 17, but will select the embodiment illustrated in the Figure 2 for use at the matching ends between two consecutive shingles 10. Thus, as the edge

of one shingle is tacked down, the roofer will insert one of the hooks, say hook 27, around the edge portion of the slot-forming end 16 and will drive a nail through the anchoring portion 22. The next shingle is then abutted against the shingle thus tacked down and a nail is inserted through the anchor portion 23 and driven tight. Thus, the first course of shingles is securely held by nails as is usually done in the first course of shingles, but a row of hook members is now presented in a true line along the upper end 16 of the slot 17 all along the first course of shingles. Thus, the roofer does not measure or adjust for position when mounting his second row of shingles, but merely places the lower edge of the shingle in the clip presented by the upwardly extending hooks 21 and 26 as described. The shingles are then anchored by nailing through the anchor portion of the appropriate alignment clip as described in connection with the first course of shingles.

Thus, as each course of shingles is applied to the roof, an upwardly extending series of hooks is automatically provided to align the next succeeding course of shingles. The roofer need not align or position his shingles after he has once established his first course.

However, this invention provides something more than the alignment feature first discovered, the hooks which would normally be considered as alignment hooks to align the next succeeding course of shingles actually grips the edge of the shingle and also grips the end 16 of the next preceding course of shingles, and therefore, actually clips together the edge of the one course of shingles and the slot end 16 of the next preceding course of shingles. Therefore, wind and storms will not be able to lift the leaves 11, 12 and 13 and allow rain and snow to be driven up under the shingle as often happens during violent storms. Thus, the life of the roof is greatly extended, and moisture is kept out of the house and away from the roofing boards supporting the shingles.

It has been found that the end 16 of the slot 17 is stronger than would be expected because of the position internally of the shingle, and because of the small length of the end 16. Therefore, driving winds will be prevented from gradualy loosening the nails as might otherwise happen if the alignment clips were not tightly clipped to the preceding course of shingles.

Although the invention has been described in its preferred form with a certain degree of particularity, it is understood that the present disclosure of the preferred form has been made only by way of example and that numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

What is claimed is:

1. An alignment clip for shingles having edges defining a transverse slot therein with two parallel sides and a terminus end, said slot extending from the lower sides of the shingle and terminating inwardly thereof, said alignment clip comprising, an anchor portion tightly securable to the surface of a shingle above the terminus end of the said slot in the shingle, a stem portion extending from the anchor portion to reach the terminus end of the slot, a first hook portion looped back relative to said stem portion and loopable around said terminus end of the slot and extendable under the shingle, and a second hook

portion looped back relative to said stem portion on the side of the stem portion opposite said first hook and thereby presenting a hook into which the lower side of another shingle may be inserted, whereby said alignment clip will serve as a means to accurately and automatically align another course of shingles and whereby the lower side of said other shingles will be firmly secured against lifting by wind.

2. An alignment clip for shingles having edges defining a transverse slot therein with two parallel sides and a terminus end, said slot extending from the lower side of the shingle and terminating inwardly thereof, said alignment clip comprising, an anchor portion tightly securable to the surface of a shingle above the terminus end of the said slot in the shingle, a stem portion extending from the anchor portion to reach the terminus end of the slot, a first hook portion looped back relative to said stem portion and loopable around said terminus end of the slot and extendable under the shingle, said first hook portion having a lateral dimension not greater than the width of said slot, and a second hook portion looped back relative to said stem portion on the side of the stem portion opposite said first hook and thereby presenting a hook into which the lower side of another shingle may be inserted, whereby said alignment clip will serve as a means to accurately and automatically align another course of shingles and whereby the lower side of said other shingles will be firmly secured against lifting by wind.

3. An alignment clip for shingles having edges defining a transverse slot therein with two parallel sides and a terminus end, said slot extending from the lower side of the shingle and terminating inwardly thereof, said alignment clip being formed of wire and comprising, an anchor portion tightly securable to the surface of a shingle above the terminus end of the said slot in the shingle, a stem portion extending from the anchor portion to reach the terminus end of the slot, a first hook portion looped back relative to said stem portion and loopable around said terminus end of the slot and extendable under the shingle, and a second hook portion looped back relative to said stem portion on the side of the stem portion opposite said first hook and thereby presenting a hook into which the lower side of another shingle may be inserted, whereby said alignment clip will serve as a means to accurately and automatically align another course of shingles and whereby the lower side of said other shingles will be firmly secured against lifting by wind.

4. An alignment clip for shingles having edges defining a transverse slot therein with two parallel sides and a terminus end, said slot extending from the lower side of the shingle and terminating inwardly thereof, said alignment clip being formed of sheet material and comprising, an anchor portion tightly securable to the surface of a shingle above the terminus end of the said slot in the shingle, a stem portion extending from the anchor portion to reach the terminus end of the slot, a first hook portion looped back relative to said stem portion and loopable around said terminus end of the slot and extendable under the shingle, said first hook portion having a lateral dimension not greater than the width of said slot, and a second hook portion looped back relative to said stem portion on the side of the stem portion opposite said first hook and thereby presenting a hook into which the lower side of another shingle may be inserted, whereby said alignment clip will serve as a means to accurately and automatically align another course of shingles and whereby the lower side of said other shingles will be firmly secured against lifting by wind.

5. An alignment clip for shingles of the type having a substantially rectangular form and having transverse slots therein, said shingles also having off-set end edges adapted to cooperate with end edges of another shingle to define a composite slot similar to the transverse slots within the shingle having two parallel sides and a terminus end, said clip comprising, a first anchor portion tightly securable to the surface of one shingle above the inward terminus end of said composite slot, a second anchor portion tightly securable to the surface of another shingle above the inward terminus end of said composite slot, a first stem portion extending from the first anchor portion to reach the terminus end of the composite slot, a second stem portion extending from the second anchor portion to reach the terminus end of the composite slot, a first hook portion looped back relative to said stem portions and loopable around said terminus end of the slot and extendable under the shingle, and a second hook portion looped back relative to said stem portion on the side of the stem portions opposite said first hook and thereby presenting a hook into which the lower side of another shingle may be inserted, whereby said alignment clip will serve as a means to accurately and automatically align another course of shingles and whereby the lower edge of said other shingles will be firmly secured against lifting by wind.

6. An alignment clip for shingles comprising, a first anchor portion, a second anchor portion, a first stem portion extending from the first anchor portion, a second stem portion extending from the second anchor portion, said first and second stem portions meeting at a juncture area and forming a V, a first hook portion looped back relative to said stem portions, a second hook portion looped back relative to said stem portions on the side of said stem portions opposite said first hook portion, said first and second hook portions being laterally spaced and symmetrical about a common plane located at said juncture area of the stem portions.

DANIEL D. TYSON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,270,905	White	July 2, 1918
1,593,407	Honigbaum	July 20, 1926
2,188,090	Young	Jan. 23, 1940