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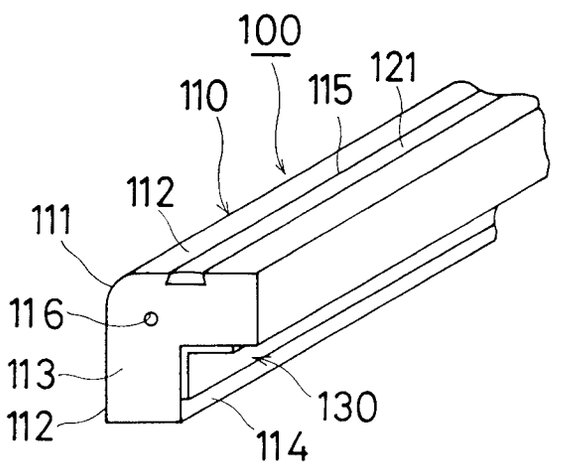
(54) **Corner building stone.**

(57) A reinforcer 130, 230, 330, 430, 530 of a material rich in elasticity is joined to an inside portion 114, 314, 317 of a stone bar 110, 310 of an L-shaped cross section. A groove 115, 315 is formed on one flat surface 112, 312 as an outside exposed surface. The groove is attached with a strip 121, 221, 321 as a coloring material which is made of a synthetic resin or synthetic rubber or the like of a color different from a color of the stone. Thus, a stone finished corner can be given a good strength and a user is prevented from slip on steps of stairs.

FIG.1



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Technical Field

The invention relates to a corner building stone of a bar shape that is provided on a corner of a building material. Such corner building materials are used at the time of sticking stones like marble or granite to corners of stairs, gateposts, building materials, etc. The inventive stone is particularly arranged on a corner of a building material having a sectional form of an acute, right or obtuse angle or a curved sectional form.

Background Art

Figs. 17 and 18 respectively show a conventional corner building stone. Fig. 17 is a perspective view of the corner building stone. Fig. 18 is a cross-sectional view of a corner with the corner building stone stuck thereto.

In the figures, a bar shaped angular stone 31 has substantially a square cross-section with their corners chamfered. It finishes a remaining exposed area at a corner of a building material after sticking work of plate stones 32 to a surface of the building material. The flat plate stones 32 are disposed at both sides of the angular stone 31 so that they contact respectively with two hidden surfaces of the angular stone 31. A work base 40, which is an object for sticking the stones, is made of concrete, reinforcement, a steel frame, etc. Mortal 41 covers a surface of the work base 40 to join the angular stone 31 and the plate stone 32 to the work base 40, thereby forming the corner of the stone stuck building material.

However, the angular stone 31 which is used for finishing the corner of the building material has a large portion hidden by the other members, so that such a hidden portion is not actually used for decoration and may be economised. However, if the thickness of the angular stone 31 is made smaller, strength of the angular stone 31 is made smaller accordingly, thereby possibly causing the stone 31 to be broken in transport or a sticking work.

Moreover, since the angular stone 31 has generally a square cross-section, it has only two sides joined to the plate stones 32 or the mortal 41. Accordingly, the joining strength between the stone 31 and the mortal 40 is relatively small, and, in case of making up corners of stairs or the like, the joining strength may lessen due to time or mechanical wear, thereby causing the angular stone 31 to come off in a short period of time.

Furthermore, a border or a corner of a step of the stairs is seen as if adjacent two sides are continuous without such a border, so that it is hard to distinguish the steps, thereby possibly causing a user, e.g. to fail to see the border of the steps and miss his or her step.

Disclosure of Invention

It is an object of the invention to provide a corner building stone that can be economically used as a decorative material.

It is another object of the invention to provide a corner building stone that can form a corner with large joining strength to a base material or other plate stones, thereby stably maintaining good condition of the corner of the stone built material.

It is a further object of the invention to provide a corner building stone that prevents a user from failing to see borders of steps and miss his or her step.

In order to achieve the above objects, in accordance with a first aspect of the inventive corner building stone, a stone bar is formed in a cross section corresponding to a corner of the building material, and a reinforcer is joined to an inside portion, opposite to an exposed outside surface, of the stone bar.

In accordance with a second aspect of the inventive corner building stone, a stone bar is formed in a cross section corresponding to a corner of the building material, a reinforcer has its one side joined to an inside portion, opposite to an exposed outside surface, of the stone bar, and a projecting portion is projected from the reinforcer in a direction away from the stone bar.

In accordance with a third aspect of the inventive corner building stone, in addition to the first or second aspect of the invention, a groove may be further formed on an exposed outside surface of the stone bar so as to extend along a length thereof, and a strip of a synthetic resin or synthetic rubber may be fitted into the groove.

In accordance with a fourth aspect of the inventive corner building stone, in addition to the first or second aspect of the invention, the stone bar may have connecting holes formed on longitudinal opposite ends, the connecting holes may longitudinally extend inwardly thereof by a fixed length and arranged coaxially, and a plurality of stone bars may be connected to each other by inserting an inserting rod into facing two connecting holes of adjacent stone bars.

With the first aspect of the invention, a corner of a building constructed with the corner building stone is given sufficient strength while decreasing amount of the stone material necessary for its building. Accordingly, costs for stone building can be lessened.

With the second aspect of the invention, a corner of a building constructed with the corner building stone is given sufficient strength while decreasing amount of the stone material necessary

for its building. Accordingly, costs for stone building can be lessened. Moreover, since the projecting portion is embedded into a joining agent like mortal, joining strength of the corner building stone to the corner can be made higher. Accordingly, condition of the corner after construction can be maintained good, even in the case of building at a place of relatively severe work condition.

With the third aspect of the invention, since the strip forms a colored part on the stone bar so that a user can easily distinguish it, the user is visually caught attention to a step position. Accordingly, the user is prevented from missing his or her step or slipping at the step and given more safety.

With the fourth aspect of the invention, jointing work of the stone bars to each other is made easy, and corner building is easier accordingly. Moreover, the stone bar is reinforced by the inserting rod and prevented from coming off from the corner.

Brief Description of Drawings

Fig. 1 is a perspective view of a first embodiment of an inventive corner building stone.

Fig. 2 is a perspective view of a reinforcer of the corner building stone of Fig. 1.

Fig. 3 is a perspective view, partially broken, of a corner finished with the corner building stone of Fig. 1.

Fig. 4 is a longitudinal section of the corner finished with the corner building stone of Fig. 1.

Fig. 5 is a perspective view of a second embodiment of an inventive corner building stone.

Fig. 6 is a perspective view of a reinforcer of the corner building stone of Fig. 5.

Fig. 7 is a longitudinal section of the corner finished with the corner building stone of Fig. 5.

Fig. 8 is a perspective view of a third embodiment of an inventive corner building stone.

Fig. 9 is a perspective view of a reinforcer of the corner building stone of Fig. 8.

Fig. 10 is a longitudinal section of the corner finished with the corner building stone of Fig. 8.

Fig. 11 is a perspective view of a fourth embodiment of an inventive corner building stone.

Fig. 12 is a perspective view of a reinforcer of the corner building stone of Fig. 11.

Fig. 13 is a longitudinal section of the corner finished with the corner building stone of Fig. 11.

Fig. 14 is a perspective view of a fifth embodiment of an inventive corner building stone.

Fig. 15 is a perspective view showing a core bar that connects reinforcers of the corner building stone of Fig. 11.

Fig. 16 is a longitudinal section of the corner finished with the corner building stone of Fig. 14.

Fig. 17 is a perspective view of an angular stone used in a conventional stone building.

Fig. 18 is a longitudinal section of a corner finished with the conventional stone.

Modes for Carrying Out the Invention

Several embodiments of an inventive corner building stone are described hereunder, particularly regarding the case of finishing corners of stairs or the like. In the accompanying figures, the same or corresponding reference characters as the conventional art show the same or corresponding parts.

[FIRST EMBODIMENT]

Fig. 1 is a perspective view of a first embodiment of an inventive corner building stone. Fig. 2 is a perspective view of a reinforcer of the corner building stone of Fig. 1. Fig. 3 is a perspective view, partially broken, of a corner finished with the corner building stone of Fig. 1. Fig. 4 is a longitudinal section of the corner finished with the corner building stone of Fig. 1.

In the figures, a stone bar 110 has substantially an L-shape cross section and its outside is exposed and becomes a design surface after work. Specifically, the bar 110 has a chamfered portion 111 that constitutes a round part of the design surface. A pair of flat portions 112 are arranged at both sides of the chamfered portion 111 so as to constitute the other parts of the design surface. A reference numeral 113 shows one of longitudinal ends of the bar 100. An inside portion 114 of the bar 110 is placed opposite to the chamfered portion 111. It is cut into an L-shaped cross section of substantially the same angle as that of the corner of a building material as a stone finished work, according to the shape of the corner, thereby reducing amount of the material of the bar 110. A groove 115 is formed on one of the flat portions 112 along its full length. A strip 121 is formed of a colored synthetic resin or synthetic rubber into substantially the same band shape as a shape of the groove 115. It is fitted in the groove 115 along its full length and stuck thereto via an adhesive or the like. The strip 121 is given a color that is distinguishable from the design or pattern of the stones. As shown in Fig. 4, the groove 115 has a cross section of a trapezoid with a lower side longer than an upper side, thereby preventing troubles of the strip 121, e.g. slipping off from the groove 115.

While the groove 115 and the strip 121 respectively have the similar trapezoidal cross section in this embodiment, they may have another cross section such as rectangular one, as desired.

Connecting holes 116 are bored into the ends 113 of the bar 110 so as to extend a predetermined length in the longitudinal direction of the bar

110. Each connecting hole 116 has a prescribed cross section such as cylindrical, quadrilateral or others. A metal inserting rod 123 has a cylindrical shape corresponding to the shape of the connecting hole 116 and its both ends are inserted in the adjacent connecting holes 116, respectively, so as to connect the ends 113 of the adjacent bars 110 directly or via some joint filler.

Here, the color of the strip 121 may be greatly different, e.g. in its hue, lightness and saturation, from the color of the other stone materials, or be fluorescent, thereby making them easily distinguished. Still, the strip 121 is not limited in the different color from the other stones, but a similar color may be selected for it in case of using it simply for preventing slippage of a user foot.

The bar 110 is reinforced by a metal or synthetic resin reinforcer 130 which is made of a steel plate, aluminum plate, stainless steel plate or synthetic resin plate, etc. The reinforcer 130 is manufactured by drawing an elongate plate into a shape closely contacted with the inside portion 114 of the bar 110, namely, into substantially an L-shaped cross section, according to the shape of the bar 110. That is, the reinforcer 130 has the same angle, in its cross section, as the inside portion 114 of the bar 110. Thus obtained reinforcer 130 is stuck firmly to the inside portion 114 of the bar 110 via synthetic resin adhesive or the like, thereby constituting a part of the corner building stone of the present embodiment. A material richer in elasticity than that of the stone bar 110 is selected for the reinforcer 130 so as to effectively prevent its crack or the like. The reinforcer 130 is preferably made into one body and such one reinforcer 130 is successively disposed along the full length of the bar 110. Still, a plurality of reinforcers 130 may be arranged on the inside portion 114 successively or at fixed intervals, according to constructing places of the corner building stone.

Thus manufactured corner building stone 100 is provided on the corner of the stairs or the like of the building, as shown in Figs. 3 and 4.

At the corner of the building, the corner building stone 100 is disposed on an outer edge of the work base 40 while closely contacted with end surfaces of the flat plates 32. Both the stone 100 and the flat plate 32 are joined to the work base 40 via the mortal 41. The strips 121 form colored lines that longitudinally extend at edges of the corners. If the corner building stones 100 are used for the corners of the stairs, these colored lines visually appeal to the users and advantageously let the users notice the steps. A desired number of corner building stones 100 are joined to each other at their ends 113 via the inserting rods 123 fitted in the connecting holes 116, in accordance with a width of the stairs.

Since the corner building stone 100 makes the stone bar 110 into a cross section of the same right angle as the edge angle of the work base 40, its positioning to the work base 40 is simple, thereby making relatively easy the stone building work.

When the corners of the stairs or the like are built with the present embodiment of corner building stones 100, the reinforcer 130 bolsters the stone bar 110. Thus, the stone bar 110 can be an angle shape so as to reduce its volume while forming the corner with sufficient strength, thereby lessening a total amount of the stones necessary for building the corners. Moreover, when used for the stairs, the strip 121 forms a colored part on an edge of the corner, which is to be a footing for the user, so as for the user to distinguish it. The strip 121 serves to prevent slippage, too. Moreover, the strip 121 is made of an elastic material and fitted into the groove 115 with the help of elastic deformation, so that its mounting work is easy. Furthermore, the groove 115 of the bar 110 and the strip 121 have a trapezoidal cross section with its lower side longer than the upper side, respectively, so that the strip 121 can be hooked surely in the groove 115 and slipping-off of the strip 121 is surely prevented.

[SECOND EMBODIMENT]

Fig. 5 is a perspective view of a second embodiment of an inventive corner building stone. Fig. 6 is a perspective view of a reinforcer of the corner building stone of Fig. 5. Fig. 7 is a longitudinal section of the corner finished with the corner building stone of Fig. 5.

In the figures, a strip 221 as a colored line is obtained by filling a colored synthetic rubber or synthetic resin into the groove 115 of the bar 110 and drying it, in the second embodiment. The strip 221 may be formed by a paint as a colored material which exhibits a different color from the color of the stone. The strip 221 can be improved in its adhering strength to the groove 115 by coating an adhesive on the surface of the groove 115 before filling the synthetic resin or rubber therein or by mixing an adhesive beforehand in the synthetic resin or rubber. The strip 221 shows a distinguishable color in the pattern or design of the stone and ensures the user a safety, as in the first embodiment. A reinforcer 230 for strengthening the bar 110 is made of a synthetic resin, a steel plate, or other metal like aluminum and stainless steel, as in the first embodiment. The reinforcer 230 has a joining portion 231 made of an elongate flat plate. It has a pair of projecting portions 232 protruded parallel at both lateral sides of the joining portion 231, too. Thus, the reinforcer 230 has a channel cross section as a whole. The projecting portion

232 may be formed at one lateral side of the reinforcer 230. Specifically, the projecting portion 232 has a plurality of trapezoidal cut-out portions 233 at fixed intervals on the elongate plate, and forms trapezoidal hook portions 234 between the cut-out portions 233. Each cut-out portion 233 is a trapezoidal shape with its joining portion side larger than the other side. Accordingly, each hook portion 234 is a trapezoidal shape with its joining portion side shorter than the other side. The reinforcer 230 is fixed to the inside portion 114 of the stone bar 110 via an adhesive, except the projecting portions 232 of one side.

In the present embodiment, the angle between the joining portion 231 and the projecting portion 232 of the reinforcer 230 is the same angle as the angle of the inside portion 114 of the bar 110, namely about 90 degrees, since the angle of the inside portion 114 is about 90 degrees. However, the projecting portion 232 of the reinforcer 230 may be projected from the joining portion 231 at other angles than 90 degrees, as long as it is the same angle as the angle of the inside portion 114 of the bar 110. For example, in case an inside surface angle of the bar is obtuse, an angle between a joining portion and a projecting portion of a reinforcer is made same, though not shown. In this case, the reinforcer will have a channel cross section or a cross section of a trapezoid with both projecting portions separatingly inclined to the joining portion at a fixed obtuse angle. This modification also has the same advantageous effects that the joining portion and one projecting portion can be in full contact with the inside surface of the bar and joined surely and strongly thereto, while the other projecting portion is embedded into the mortal 41, thereby improving the joining strength of the bar to the work base 40.

Fig. 7 shows the corner of the work base 40 finished with the corner building stone 200, in which the reinforcer 230 is secured to the inside portion 104 of the stone 200 while having its projecting portion 232 and a plurality of hook portions 234 embedded in the mortal 41. Moreover, sticking work of the reinforcer 230 to the bar 110 can be easily carried out by making the joining portion 231 and one of the projecting portions 232 fully touch the inside portion 114, so that the sticking work does not take much time and labor and work efficiency improves.

The projecting portion 232, particularly the hook portions 234 function to prevent the reinforcer 230 from being unfastened or loosened, so that the corner building stone 200 is firmly mounted on the work base 40. In the assembled state, the trapezoidal hook portion 234 has its bar side shorter than the opposite side, thereby more reliably preventing the unfastening of the corner building stone 200. The strip 221 fitted in the groove 115 forms a distinguishable colored line that catches attention of the user, as in the first embodiment. Moreover, since the strip 221 is integrally disposed in the groove 115 by filling method, it is joined to the groove 115 without fail and its coming-off or displacement from the groove 115 is effectively prevented.

Namely, the second embodiment has similar advantageous effects to those of the first embodiment, and additional advantages that the corner built with the inventive stone 200 is excellent in joining strength of the bar 110 to the work base 40 and that the strip 221 attracts much attention of the user at the edge part of the corner or the footing for the user.

[THIRD EMBODIMENT]

Fig. 8 is a perspective view of a third embodiment of an inventive corner building stone. Fig. 9 is a perspective view of a reinforcer of the corner building stone of Fig. 8. Fig. 10 is a longitudinal section of the corner finished with the corner building stone of Fig. 8.

In the figures, a stone bar 310 of a corner building stone 300 has a chamfered portion 311, a pair of flat portions 312, a pair of end portions 313, an inside portion 314, a groove 315 and a pair of connecting holes 316, like the bar 110 of the first and second embodiments. The bar 310 further has an opposite surface to the chamfered portion 311 also chamfered to form an inclined portion 317. Namely, the inside portion 314 of the bar 310 is composed of a pair of flat surfaces, that are substantially parallel to the crossing two surfaces of the corner, and the inclined portion 317 connecting the flat surfaces at a fixed angle thereto. A strip 321 has a color that is distinguishable from the color of the stone. It is made of a colored synthetic resin or synthetic rubber that has substantially a T-shaped cross section. The strip 321 has its narrower part fitted and fastened into the groove 315 and its wider part exposed from the flat surfaces 312. Specifically, as shown in Fig. 10, the narrower part of the strip 321 has a cross section of a trapezoid with its lower side longer in accordance with the cross section of the groove 315, thereby preventing coming-off of the strip 321 from the groove 315 or the like. A reinforcer 330 is made of an elongate body of substantially an L-shaped cross section. It has a flat plate joining portion 331 and a flat plate projecting portion 332 which is projected from one lateral side of the joining portion 331 substantially at right angles. A plurality of trapezoidal cut-out portions 333 are formed at fixed longitudinal intervals on the projecting portion 332 so as to define hook portions 334 between the cut-

out portions 333, as in the second embodiment. The reinforcer 330 is joined to the inclined portion 317 at the joining portion 331 via an adhesive, thereby constituting the corner defining stone 300 together with the stone 310.

The corner building stone 300 is stiffly stuck to the work base 40 at the corner, as shown in Fig. 10. At the edge portion of the corner, the strip 321 of a color distinguishable color the stone color is extended along the length of each step of the stairs while projecting its wider part upward. This wider part of the strip 321 catches attention of the user at the border of the steps and serves to prevent slip of the user's foot.

Accordingly, in addition to similar advantageous effects as those of the first embodiment, it is possible to reduce the volume or amount of the stone necessary for corner building, since the bar 310 is strengthened by the reinforcer 330, which also serves to prevent coming-off of the bar 310 after embedding. Moreover, the corner is excellent in joining strength of the bar 310 after its building. Furthermore, the colored strip 312 is easy for the user to distinguish the footing so as to prevent his or her slip.

[FOURTH EMBODIMENT]

Fourth and fifth embodiments are described hereafter, wherein a reinforcer is engaged with other member or joined thereto so as to serve to prevent coming-off of a bar.

Fig. 11 is a perspective view of a fourth embodiment of an inventive corner building stone. Fig. 12 is a perspective view of a reinforcer of the corner building stone of Fig. 11. Fig. 13 is a longitudinal section of the corner finished with the corner building stone of Fig. 11.

In the figures, a metal core bar 441 is connected with a reinforcing steel or the like of the work base 40 and serves to prevent a corner building stone 400 from coming off from it after construction. The stone bar 310 is braced by a reinforcer 430 which is made of a steel plate, a synthetic resin, a metal like aluminum, a stainless steel, etc. It is fabricated by cutting part of an elongate flat plate at fixed intervals along its length and standing these cut pieces. Namely, the reinforcer 430 is composed of a base 431 and standing pieces 432, and through holes 433 are bored and aligned coaxially on the standing pieces 432. Each hole 433 has a shape corresponding to a cross section of the core bar 441, or is made circular in the illustrative embodiment.

This reinforcer 430 has the base 431 joined to the inclined portion 317 of the bar 310. The core bar 441 is inserted into the through holes 433 of the standing pieces 432 and connected to the reinforcing steel not shown of the work base 40. Then, they are stuffed with the mortal 41 thereby to join the work base 40 and the corner building stone 400. Thereafter, the flat plate stones 32 are laid on the mortal 41. Fig. 13 shows the corner built as above. In this state, the reinforcer 430 is embedded in the mortal 41 while the core bar 441 is inserted into the through holes 433, so that the standing pieces 432 and the core bar 441 serve to prevent coming-off of the corner building stone 400. Thus, the corner building stone 400 can be constructed firmly on the work base 40.

Accordingly, in addition to similar effects to those of the second embodiment, the corner can be more stiffly formed by connecting the core bar 441 to the reinforcer 430 which functions as coming-off preventing member after being embedded in the mortal 41.

[FIFTH EMBODIMENT]

Fig. 14 is a perspective view of a fifth embodiment of an inventive corner building stone. Fig. 15 is a perspective view showing a core bar that connects reinforcers of the corner building stone of Fig. 11. Fig. 16 is a longitudinal section of the corner finished with the corner building stone of Fig. 14.

In the figures, a reinforcer 530 is composed of an elongate flat plate 531 made of a steel plate or the like and a plurality of L-shaped projecting pieces 532 which are projected at fixed intervals along the length of the plate 531. In the illustrative reinforcer 530, the projecting piece 532 is fixed at its base end to one lateral side of the plate 531. A half part, near the base end, of the projecting piece 532 is extended substantially at right angles to the plate 531, and the other half part, near a leading end, of the projecting piece 532 is extended substantially parallel to the plate 531. Thus, the reinforcer 530 has a channel cross section when cut at the projecting piece 532. A core bar 441 which is connected to a steel reinforcement (not shown) of the work base 40 is further connected to the leading ends of the projecting pieces 532 by winding wires 533 thereon.

This reinforcer 530 has its surface, opposite to the projecting pieces 532, stuck to the inclined portion 317 of the bar 310 via an adhesive, thereby constituting a corner building stone 500 of the fifth embodiment.

Fig. 16 shows a corner which has the work base 40 constructed with the corner building stone 500. The reinforcer 530 is embedded in the mortal 41 while having its projecting pieces 532 joined to the core bar 441. Thus, the reinforcer 530 and the core bar 441 serve, in cooperation, to prevent the stone 500 from coming off, so that the corner

building stone 500 is reliably fastened to the work base 40.

Accordingly, in addition to the effects of the above mentioned embodiments, it is possible to build a corner that is excellent in fixing strength by connecting the core bar 441 to the reinforcer 530.

While all of the corner building stones 100, 200, 300, 400 and 500 are built on the work base 40 such as stairs in the illustrative embodiments, the inventive corner building stone may be otherwise practised, e.g. in building any corners of gateposts or other buildings, that will need stone finishing. In this case, as a matter of course, the groove 115, 315 may be omitted, or the colored strip 121, 221, 321 may be omitted and only the groove may be provided.

While the above embodiments uses a synthetic resin or synthetic rubber or the like as a colored material, in the inventive corner building stone, any material of a color that a user will easily distinguish from other stones may be available. As a matter of course, the strip 121, 221, 321 is not limited in the different color from the color of the stones, and it may be similar color to that if used only as a slip preventing member. However, if it has a distinguishable color, user's safety is more assured. Namely, while the corner building stone 100, 200, 300, 400, 500, after constructing, has a colored line at its edge portion of the corner or a footing of the user, such a colored line is not always necessary. The corner may have a continuous patter or color of the stone, depending on places for building or as desired.

While the corner building stone 100, 200, 300, 400, 500 of each embodiment is substantially L-shaped or rectangular cross section, it may have a cross section of another angle or a curved cross section in accordance with a corner to be built. While the stone bar 110, 310 has substantially an L-shaped cross section for disposing at the corner of the building, any shape may be selected as long as the stone bar can form a design surface without any waste of stone material. Moreover, the reinforcer 130, 230, 330, 430, 530 may have another configuration or be disposed at another position as long as it has a desired strength. A reinforcer 130, 230, 330, 430, 530 of a material rich in elasticity is joined to an inside portion 114, 314, 317 of a stone bar 110, 310 of an L-shaped cross section. A groove 115, 315 is formed on one flat surface 112, 312 as an outside exposed surface. The groove is attached with a strip 121, 221, 321 as a coloring material which is made of a synthetic resin or synthetic rubber or the like of a color different from a color of the stone. Thus, a stone finished corner can be given a good strength and a user is prevented from slip on steps of stairs.

Claims

1. A corner building stone composed of a stone bar disposed at a corner of a building material (40), characterized in that

   a stone bar (110, 310) is formed in a cross section corresponding to a corner of the building material (40), and a reinforcer (130, 230, 330, 430, 530) is joined to an inside portion (114, 314, 317), opposite to an exposed outside surface (111, 112, 311, 312), of the stone bar.

2. A corner building stone composed of a stone bar disposed at a corner of a building material (40), characterized in that

   a stone bar (110, 310) is formed in a cross section corresponding to a corner of the building material (40), a reinforcer (230, 330, 430, 530) has its one side joined to an inside portion (114, 314, 317), opposite to an exposed outside surface (111, 112, 311, 312), of the stone bar, and a projecting portion (21) is projected from the reinforcer in a direction away from the stone bar.

3. A corner building stone as recited in claim 1 or claim 2, wherein the reinforcer (230, 330, 430, 530) is made of a material of higher elasticity than elasticity of the stone bar and formed into an elastic body continuously extending along substantially a full length of the inside portion of the stone bar.

4. A corner building stone as recited in claim 3, wherein the material of the reinforcer (230, 330, 430, 530) is one selected from a group consisting of an iron, a synthetic resin, an aluminum and a stainless steel.

5. A corner building stone as recited in claim 1 or claim 2, wherein the inside portion (114, 314, 317) of the stone bar (110, 310) is formed into substantially an L-shaped cross section of substantially the same angle as an angle of the corner of the building material.

6. A corner building stone as recited in claim 1, wherein the inside portion (114) of the stone bar (110) is formed into substantially an L-shaped cross section of substantially the same angle as an angle of the corner of the building material, and at least a part of the reinforcer (130, 230) is formed into substantially an L-shaped cross section of the same angle as the angle of the inside portion of the stone bar.

7. A corner building stone as recited in claim 1, wherein the rear side of the stone bar is formed into substantially an L-shaped cross section of substantially the same angle as an angle of the corner of the building material, the reinforcer is made into substantially a channel plate including an elongate plate shaped joining portion and a pair of plate shaped projecting portions extending from both lateral sides of the joining portion at the same angle as the angle of the inside portion of the stone bar, the joining portion and one of the projecting portion is joined in full contact with the inside portion of the stone bar, and the other projecting portion is embedded into a mortal which joins the corner of the building material and the stone bar.

8. A corner building stone as recited in claim 7, wherein the reinforcer (230) has an elongate shape extending continuously along substantially a full length of the inside portion (114) of the stone bar (110), and at least the other projecting portion (232) is formed with a predetermined shape of cut-out portions (233) at fixed intervals on an elongate plate.

9. A corner building stone as recited in claim 8, wherein the one projecting portion (232) of the reinforcer (230) is formed with a predetermined shape of cut-out portions (233) at fixed intervals on the elongate plate.

10. A corner building stone as recited in claim 9, wherein the cut-out portion (233) of the reinforcer (230) has a trapezoidal shape with its side of joining portion (231) longer than the other side.

11. A corner building stone as recited in claim 1, wherein the inside portion (314) of the stone bar (310) is composed of a pair of flat surfaces crossing at substantially the same angle as an angle of the corner of the building material so as to be disposed substantially parallel to the angular surface of the corner and an inclined portion (317) crossing the flat surfaces at a fixed angle to connect them, the reinforcer (330) is formed into substantially an L-shaped plate composed of an elongate plate shaped joining portion (331) joined to the inclined portion of the stone bar and a plate shaped projecting portion (332) angularly extending from one lateral side of the joining portion, and the projecting portion of the reinforcer is embedded into a mortal (41) which joins the corner of the building material and the stone bar.

12. A corner building stone as recited in claim 11, wherein the reinforcer (330) has an elongate shape extending continuously along substantially a full length of the inside portion (114) of the stone bar (310), and the projecting portion (332) is formed with a predetermined shape of cut-out portions (333) at fixed intervals on an elongate plate.

13. A corner building stone as recited in claim 12, wherein the cut-out portion (333) of the reinforcer (330) has a trapezoidal shape with its side of joining portion (331) longer than the other side.

14. A corner building stone as recited in claim 1, wherein the inside portion (314) of the stone bar (310) is composed of a pair of flat surfaces crossing at substantially the same angle as an angle of the corner of the building material so as to be disposed substantially parallel to the angular surface of the corner and an inclined portion (317) crossing the flat surfaces at a fixed angle to connect them, the reinforcer (430) is composed of an elongate plate shaped base (431) joined to the inclined portion of the stone bar and a plurality of standing portions (432) formed by cutting and standing part of the base at fixed intervals, and the standing portions of the reinforcer are embedded into a mortal (41) which joins the corner of the building material and the stone bar.

15. A corner building stone as recited in claim 14, wherein the reinforcer (430) has an elongate shape extending continuously along substantially a full length of the inside portion (114) of the stone bar (310), the standing portions (432) have through holes (433) respectively aligned coaxially so that a metal core bar (441) is able to be inserted therethrough, and the core bar is also embedded into the mortal.

16. A corner building stone as recited in claim 1, wherein the inside portion (314) of the stone bar (310) is composed of a pair of flat surfaces crossing at substantially the same angle as an angle of the corner of the building material so as to be disposed substantially parallel to the angular surface of the corner and an inclined portion (317) crossing the flat surfaces at a fixed angle to connect them, the reinforcer (530) is composed of an elongate plate (531) joined to the inclined portion of the stone bar and a plurality of hooks (532) of an L-shaped rod with their base ends fixed to the plate at fixed intervals, and the hooks of the reinforcer are embedded into a mortal (41) which joins

the corner of the building material and the stone bar.

17. A corner building stone as recited in claim 16, wherein a metal core bar (441) is attached to the hooks of the reinforcer and also embedded into the mortal.

18. A corner building stone as recited in claim 1 or claim 2, wherein a groove (115, 315) is formed longitudinally on the exposed surface (111, 112, 311, 312) of the stone bar (110, 310), and a strip (121, 221, 321) of a synthetic resin or synthetic rubber is arranged in the groove.

19. A corner building stone as recited in claim 18, wherein the strip (121, 221, 321) has a color different from a color of the exposed surface of the stone bar (110, 310).

20. A corner building stone as recited in claim 18, wherein the strip (321) is projected from the exposed surface of the stone bar (310).

21. A corner building stone as recited in claim 1, wherein the stone bar (110, 310) has connecting holes (116, 316) formed on longitudinal opposite ends, the connecting holes longitudinally extend inwardly thereof by a fixed length and arranged coaxially, and a plurality of stone bars are able to be connected to each other by inserting an inserting rod (123) into facing two connecting holes of adjacent stone bars.

FIG.1

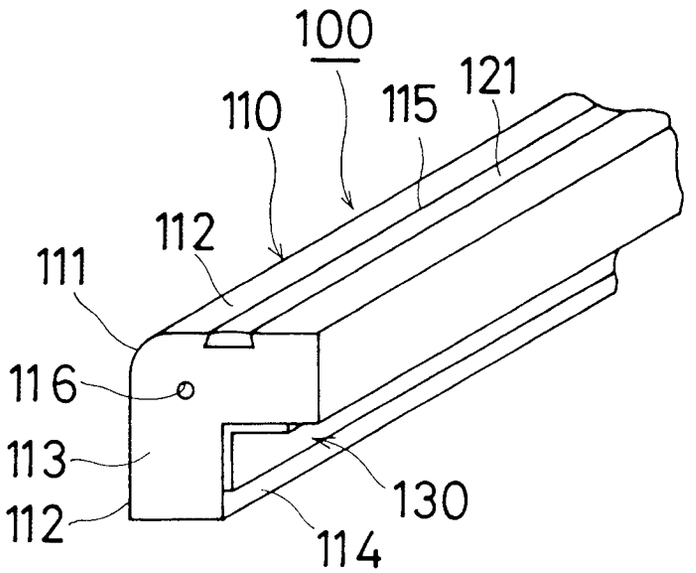

FIG.2

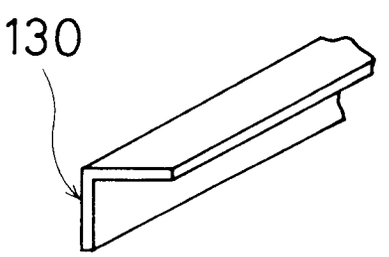

FIG. 3

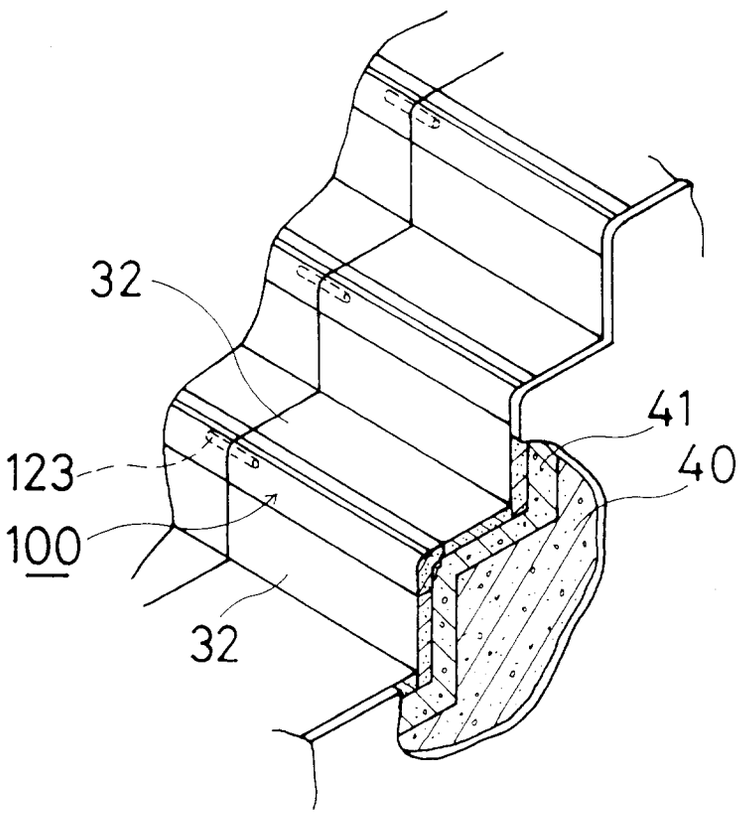

FIG. 4

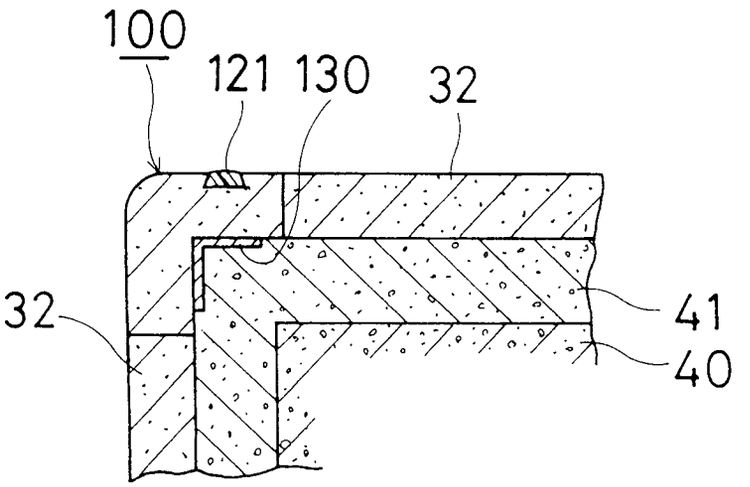

FIG. 5

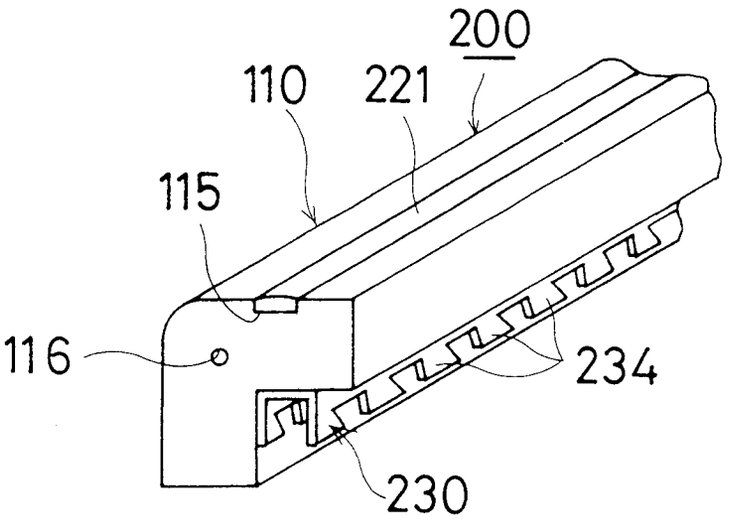

FIG. 6

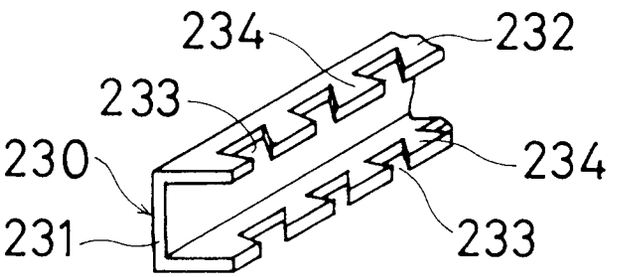

FIG. 7

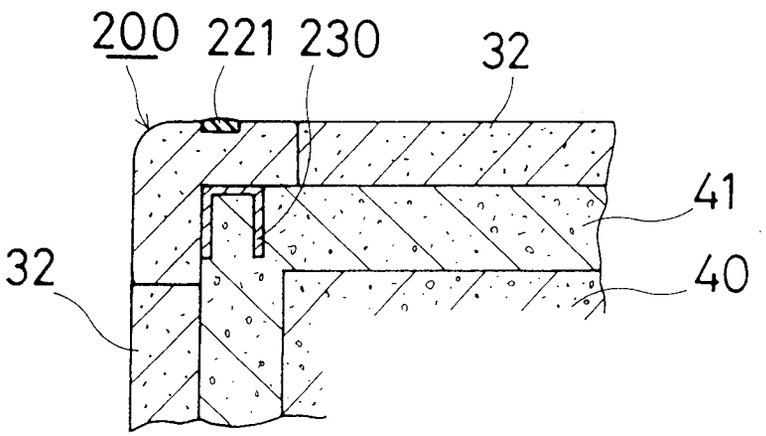

FIG.8

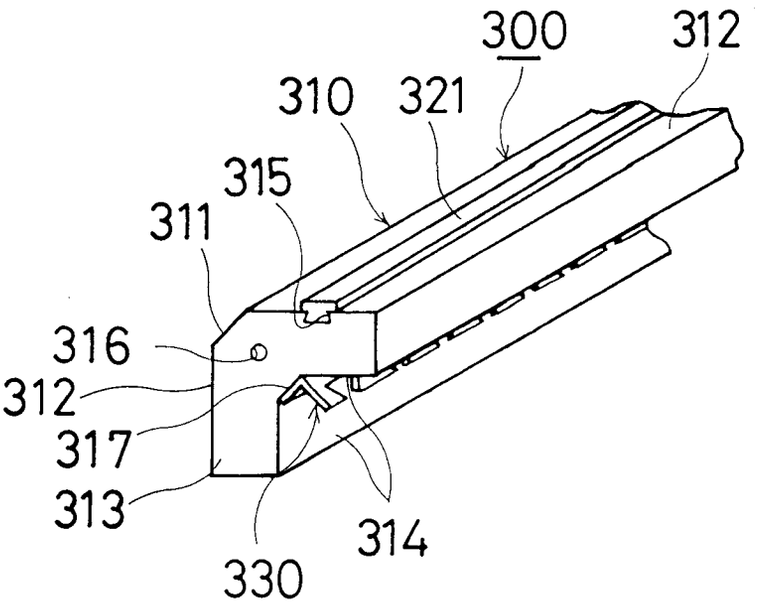
300
312
310
321
315
311
316
312
317
313
314
330

FIG.9

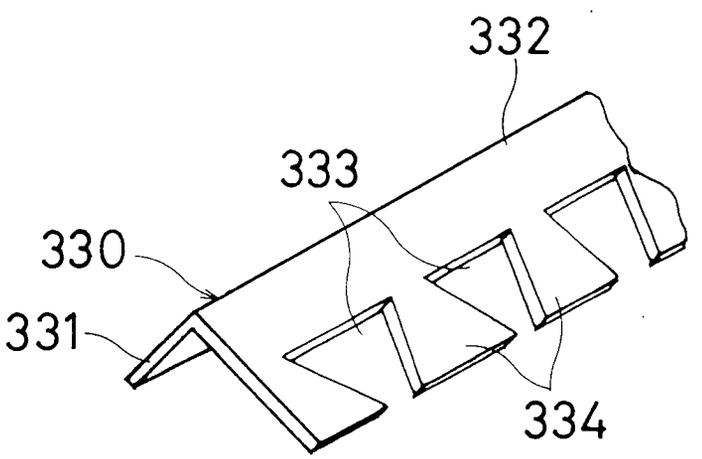
332
333
330
331
334

FIG.10

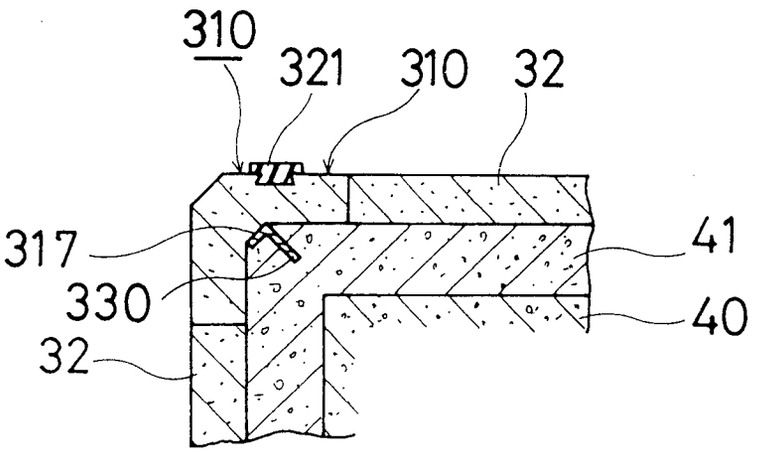

FIG.11

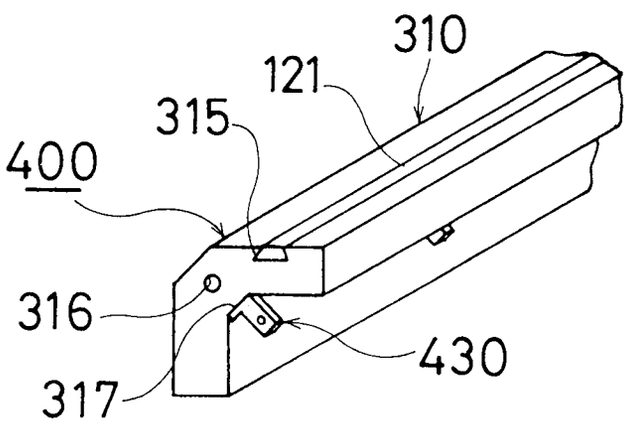

FIG.12

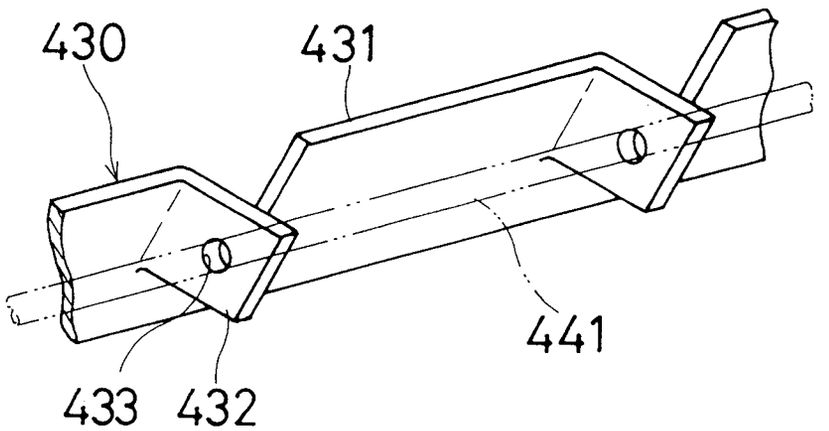

FIG.13

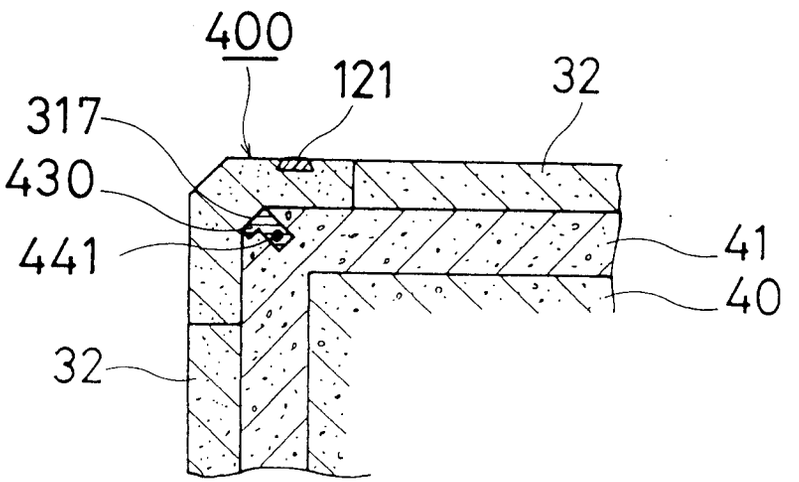

FIG.14

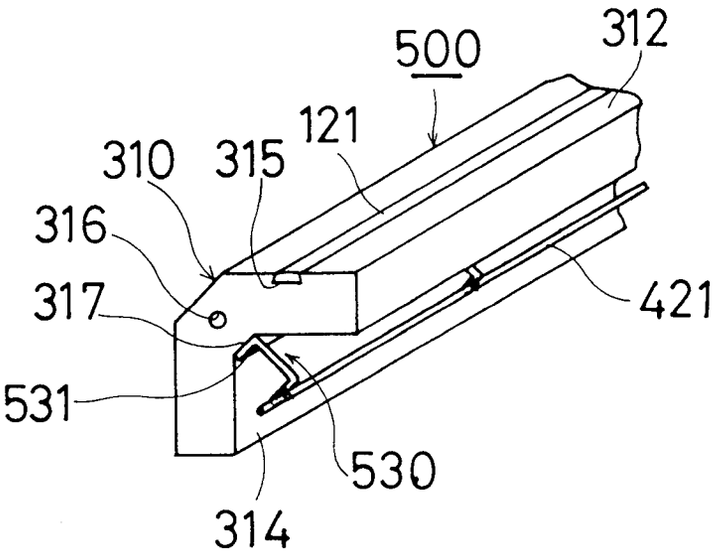

FIG.15

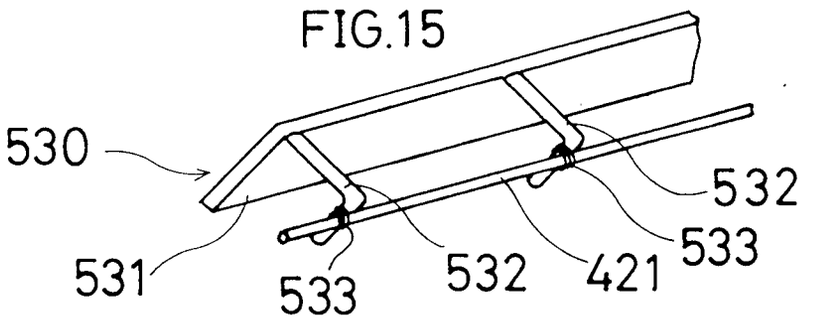

FIG.16

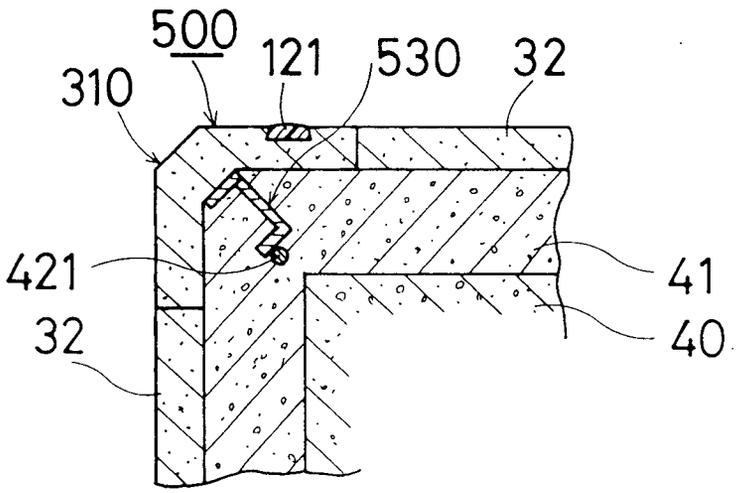

FIG.17

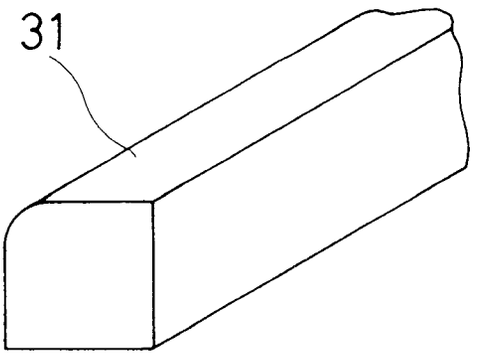

FIG.18