July 11, 1961 S. J. STILES 2,991,532

CHAMFER STRIP FOR CONCRETE FORMS

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FIG. 2

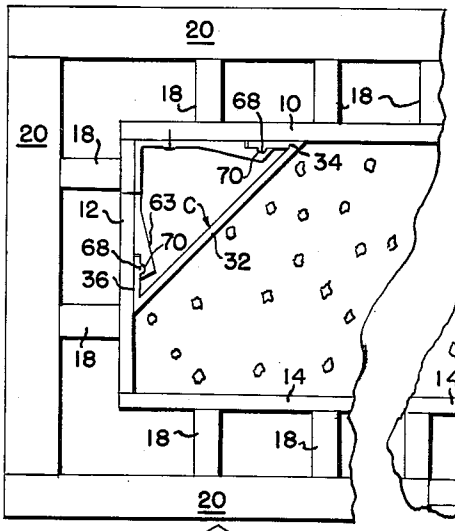


FIG. 1

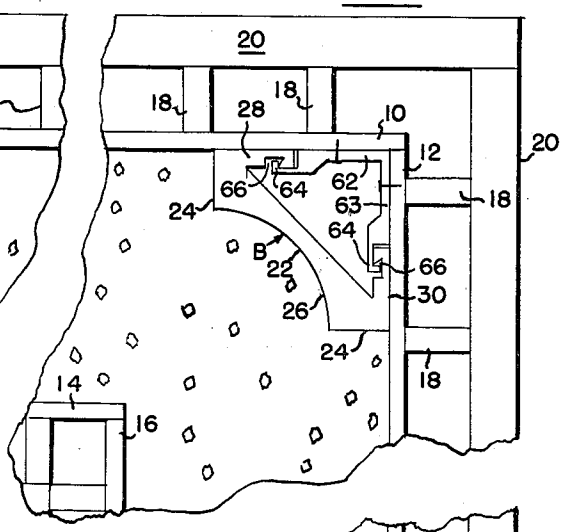


FIG. 2A

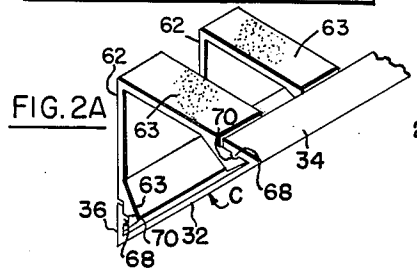


FIG. 3

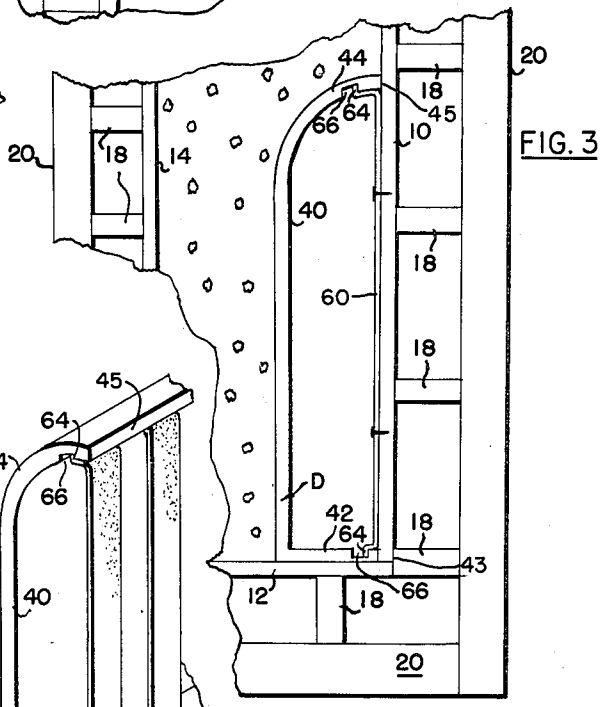


FIG. 1A

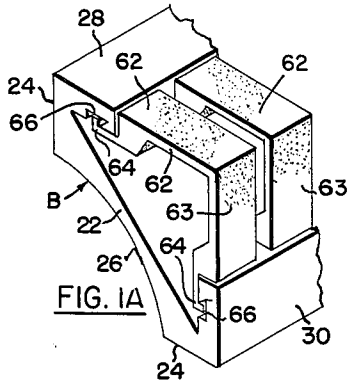


FIG. 3A

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FIG. 7

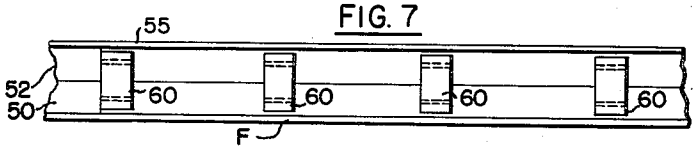


FIG. 5

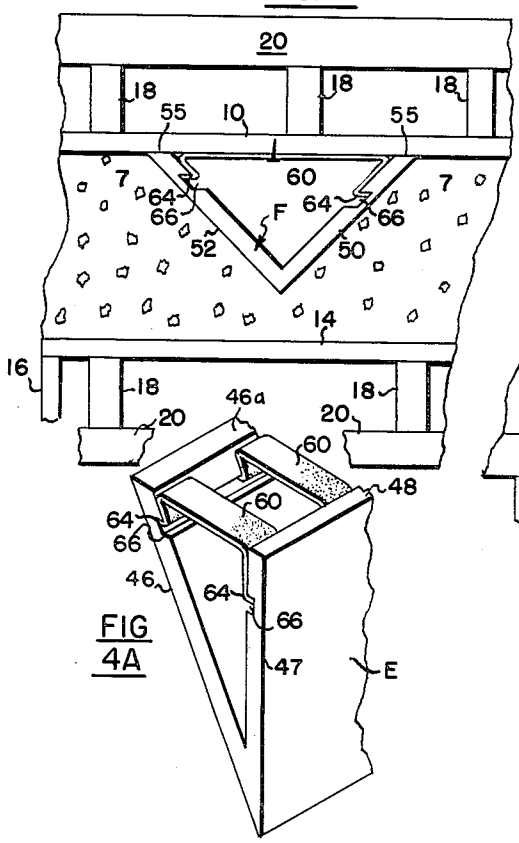


FIG. 4

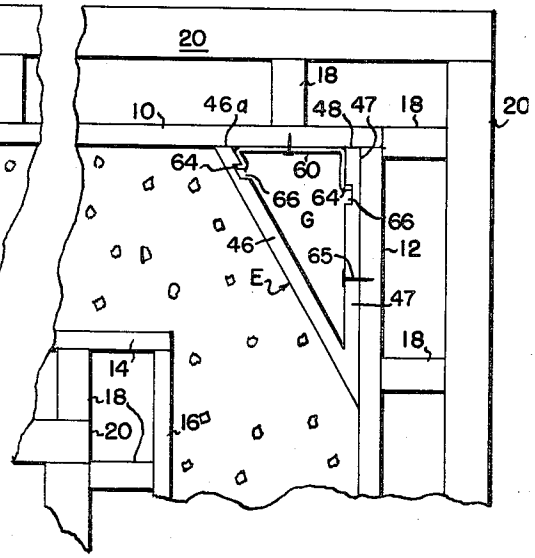


FIG 4A

FIG. 6

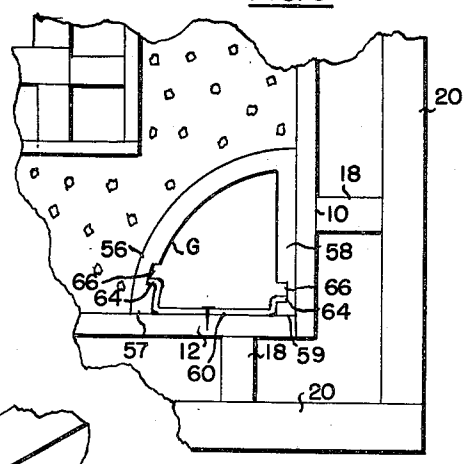
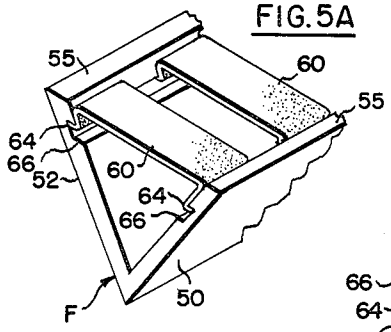


FIG. 5A



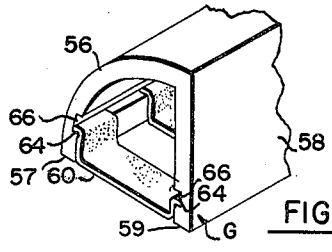


FIG. 6A

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CHAMFER STRIP FOR CONCRETE FORMS

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Filed Dec. 1, 1959, Ser. No. 856,391
5 Claims. (Cl. 25—118)

Broadly, this invention relates to the art of pouring concrete and, specifically, it relates to what is known in the trade as chamfer strip which is used in connection with concrete forms to predetermine the shape, or the topography, of the finished concrete structure.

In pouring concrete, it is sometimes desirable to provide fluted surfaces, or round instead of sharp angled junctions of adjacent walls, etc. The effects referred to are sometimes intended for decorative purposes and sometimes for utilitarian purposes. For example, the flutes can be used as keys for receiving material into which nails or screws can be driven or for spacing abutting surfaces to provide air spaces therebetween, etc.

To the best of my knowledge, and after many years of experience in the building trade, it has heretofore been the practice to fabricate the chamfer strip according to the requirements of each particular job. For example, if it was desired to flatten, or to round out, the junction of two walls, it was necessary to fabricate a flat or a round chamfer strip of the desired size and form and to secure it to the form into which concrete is to be poured. This meant that new chamfer strips had to be built for each job and, when the price of wood and when the wages of a skilled carpenter and his helpers are considered, it can be seen that the cost of providing chamfer strips greatly increases the cost of the pouring operation.

It is, therefore, one object of this invention is to produce a number of pre-fabricated chamfer strips which can produce any one of a number of effects, or any combination of effects and which can be used over and over again, thus eliminating the high cost of labor and material which are involved in on-the-job fabrication of chamfer strips and molds. Moreover, the precision components of my invention insure uniform perfection of the finished product which is not attainable except, perhaps, by the most skilled carpenters.

A still further object of the invention is to produce improved, prefabricated means which can be repeatedly used for detachably and readily securing prefabricated chamfer strip to concrete-receiving forms, and which are equally readily dismantled and stored for subsequent use.

The full nature of the invention will be understood from the following specification and the accompanying drawings in which:

FIGS. 1 to 6 are fragmentary horizontal sectional views showing portions of concrete forms, each using a different type chamfer strip embodying the invention.

FIGS. 1–A to 6–A are fragmentary perspective views showing the chamfer strips used in FIGS. 1 to 6 respectively.

FIG. 7 is an elevational view of the strip shown in FIG. 5 and the brackets for securing it to a concrete-receiving form.

In FIGS. 1 to 6, reference numerals **10** and **1** designate the walls which constitute one side of a concrete form and numerals **14** and **16** designate the walls which constitute the opposite side of said form. The walls referred to are suitably buttressed against the weight of the concrete poured therebetween by suitable frame-work formed of horizontal and vertical joists **18** and **20**. Since the concrete form itself and its re-inforcement are conventional and form no part of the present invention, they are not shown nor described in further detail. When it is not desired to produce any specific effects, that is, for

example, when a flat surfaced wall, or when a right angled junction is desired, no chamfer strip is used. If it is desired to produce some special effect in the surface of a wall or at the junction of adjacent walls, one or the other of the chamfer strips or molds illustrated, will be used.

Strip B of FIGS. 1 and 1–A, includes an elongated body portion **22** having flat surfaces **24** and a concave surface **26** against which the concrete is poured, and limbs **28** and **30** which abut walls **10** and **12** of the form respectively.

Strip C of FIGS. 2 and 2–A includes an elongated piece **32** against which the concrete is poured and limbs **34** and **36** which abut walls **10** and **12** of the form, respectively.

Strip D of FIGS. 3 and 3–A includes an elongated body portion **40**, a right angle limb **42** which abuts wall **12** and the edge **43** of which abuts wall **10** of the form, and an arcuate end portion **44**, the edge **45** of which abuts wall **10** of the form.

Strip E of FIGS. 4 and 4–A, includes an elongated body portion **46** against which the concrete is poured and one edge **46***a* of which abuts wall **10**, and limb **47** which abuts wall **12** and the edge of which abuts wall **10** of the form.

Strip F of FIGS. 5 and 5–A includes two angularly disposed limbs **50** and **52** against which concrete is poured and the edges **55** of which abut wall **10** or **12** of the form.

Strip G of FIG. 6 and 6–A includes an arcuate body portion **56** against which concrete is poured and the edge **57** of which abuts wall **12**, and limb **58** of which abuts wall **10**, and the edge **59** of which abuts wall **12** of the form.

The concrete facing portions of strips B, D, E, F and G are secured in position by means of spaced brackets in the manner best shown in FIG. 5. While they differ in minor details, each of the brackets includes a body portion **60** which may abut wall **10** or wall **12** as in FIGS. 4 and 6, or angled walls **62** and **63**, which abut walls **10** and **12**, as in FIGS. 4 and 5. In all embodiments, the ends of the brackets are provided with fingers **64** which are adapted to engage recesses **66** in the corresponding limbs of the concrete facing portions, as shown in FIGS. 1, 3, 4, 5 and 6 or with round detents **68** which are adapted to engage recess **70**.

In all of the embodiments, at least the parts of the chamfer strips which come in contact with the poured concrete are formed of a smooth, non-adhering, non-reacting synthetic or metallic material having the necessary resiliency. For example, slightly springy, sheet metal can be used, or the parts can be molded, or extruded, from a synthetic material such as methyl methacrylate, or any of the other numerous synthetic materials which can be molded or extruded to produce light and resilient components which can resist the pressures to which they will be subjected in actual use but which can be somewhat distorted or deflected.

Since the various chamfer strips are used in generally the same manner, it is thought that a description of the strips of FIGS. 1 and 5 will suffice.

To use the strip of FIG. 1 side wall **62**, or side wall **63** of each of the spaced brackets shown in FIG. 7 is nailed, as at **65**, or otherwise detachably secured, to wall **10**, or to wall **12**, of the concrete-receiving form and strip or member **22** is secured to the brackets by engaging one margin of the strip to one wall **62** of each bracket and then distorting the strip to engage its opposite margin with wall **63** of the bracket.

To use the devices of the other embodiments, wall **60** of the bracket is nailed to a wall of the form, as at **65**, and the fingers **64**, or detents **68**, are engaged with re-

cesses 66 or 70 near one margin of the corresponding strip D, E, F or G, and the opposite fingers of the brackets are snapped into engagement with the opposite margin of the strip. After the concrete has set enough, the form is dismantled. Since all of the concrete facing portions are so shaped as not to be interlocked with the concrete, the entire chamfer strip will come off with the wall of the concrete receiving form to which they are attached.

It will be evident that, by having a set of chamfer strips of different shapes, various effects can be produced, and because my chamfer strips can be used over and over again, considerable saving of material is effected and uniform results are obtained.

What I claim is:

1. A chamfer device for use with a form for pouring concrete, said device including an elongated member formed of a resilient, non-concrete adhering member and including at least one concrete molding surface, said elongated member having opposed, longitudinally spaced notches disposed near, and inwardly of, the opposite edges thereof, a plurality of brackets for detachably securing said elongated member to said form, each of said brackets including a body portion and fingers carried by the opposite edges of said body portion and detachably engageable with said notches, and means securing said brackets to said form, said notches and fingers being so related that, when said fingers engage said notches, the edges of said elongated member will abut said form.

2. The structure recited in claim 1 in which the concrete molding surface of said elongated member is convex.

3. The structure recited in claim 1 in which the concrete molding surface of said elongated member is concave.

4. The structure recited in claim 1 in which said member is formed of at least two, angularly related, walls.

5. The structure recited in claim 4 in which the notches in one of said walls are nearer to the edge thereof than notches in the other wall are to the edge thereof.

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