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Charman

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[54] **THREAD OR THE LIKE DESIGNS, DRAWINGS, PICTURES, PATTERNS AND CREATIONS**

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[51] **Int. Cl.²** **A63H 33/08**

[58] **Field of Search** 35/26, 27, 28; 46/16, 17; 161/7

[56] **References Cited**

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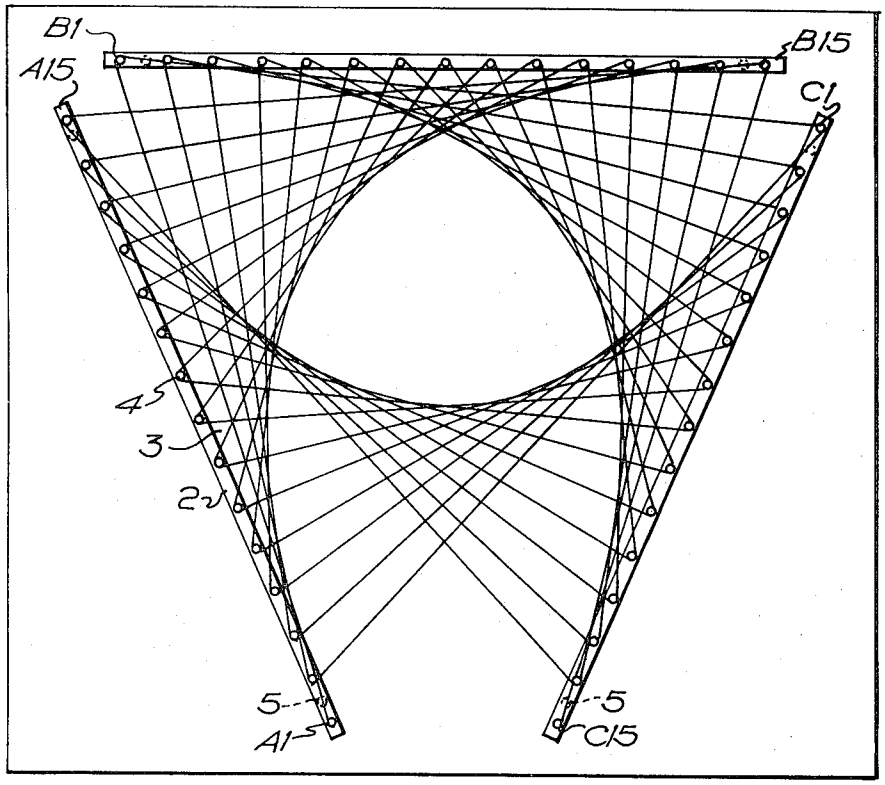
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[57] **ABSTRACT**

A kit for making a thread design or the like comprises a baseboard on which can be removably attached thread receiving strip members each having a spine from one face of which project a plurality of spaced apart pins each having one or more enlarged portions spaced from the spine to retain one or more loops of thread around the pins. The strips are preferably of moulded semi-rigid plastic material having formed integral therewith the pins and also attachment means, for example plugs for fitting into selected ones of a plurality of holes in the board to give a choice of positions defining a work area between the strips and thereby change the thread design. The strips may be flexed in the plane of the board or perpendicular thereto to take different configurations temporarily. The kit includes one or more batches of thread or the like of the same or different colours.

3 Claims, 2 Drawing Figures



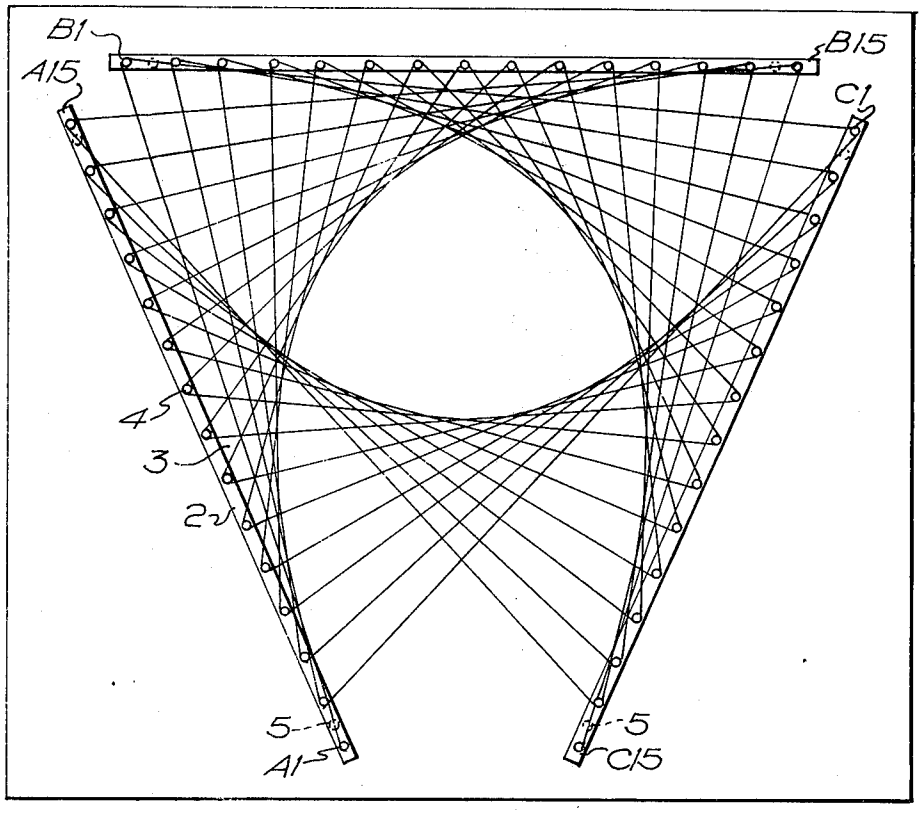


FIG. 1

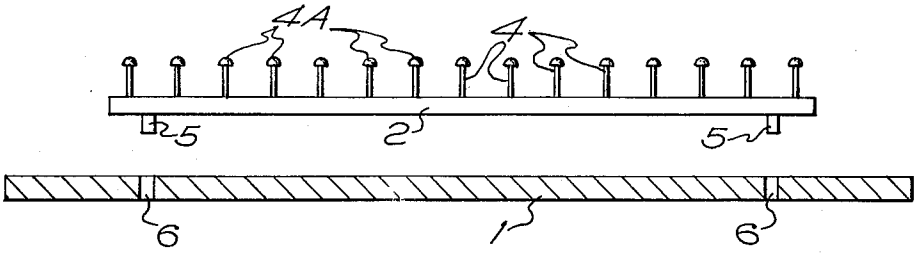


FIG. 2

THREAD OR THE LIKE DESIGNS, DRAWINGS, PICTURES, PATTERNS AND CREATIONS

This invention relates to what can be considered generally to be "thread designs" which are created by looping thread to and fro between rows of pins usually carried by a base board. These thread designs can be reset for educational and/or recreational purposes and are becoming quite popular. While the expression thread designs has been used, it should be pointed out that it is not necessary that fibrous thread be used, instead filamentary material such as plastics material filaments can be used. The designs need not be two dimensional, but usually are.

Furthermore, the designs may be or be considered to be drawings, pictures, patterns and/or creations, but only the expression designs will be used to cover all these descriptions in the interests of clarity.

The expression "thread designs" as used in this specification and the appended claims is intended to mean designs as described in the preceding paragraphs.

Conventionally, two-dimensional thread designs are created by pushing plain headed steel pins into a base board so as to form two or more rows of such pins. The thread is looped between the pins, the heads of the pins retaining the loops in position in order to create the design. The components necessary to create the thread design are usually sold in kit form.

A disadvantage of this known arrangement is that the pins have to be pushed into the board individually which is very time consuming. Moreover, individual pins tend to become lost.

According to the invention there are provided thread receiving strip members adapted for use in the creation of thread designs, each said member being moulded in plastics material and having a spine from one side of which projects a plurality of spaced apart and substantially rigid rods or pins each having an enlarged portion spaced from said spine and adapted to retain a thread looped therearound when the member is attached to a base board.

The member may have integral means at the other side thereof to enable the member to be attached to a base board. Such means may be one or more plugs to be push fitted into holes in the base board.

The said rods or pins preferably are parallel and in one plane and the enlarged portion of each comprises a head at the outer extremity of the pin.

The said member is preferably capable of being flexed at least to a limited extent to desired configurations. It will normally be straight.

Also according to the invention, there is provided a kit for making a thread design which comprises a base board, and at least two thread receiving strip members or one strip member which can be divided into at least two strip members, each strip member having a spine from one side of which projects a plurality of spaced apart and substantially rigid rods or pins each having an enlarged portion spaced from said spine, and adapted to retain a thread looped therearound, said member being for connection to the base board so that thread may be looped around and between the pins thereof to create a thread design.

The invention also provides a thread design comprising a base board and at least two thread receiving strip members attached to the base board, each of said strip members having a spine from one side of which

projects a plurality of spaced apart and substantially rigid rods or pins each having an enlarged portion spaced from said spine, and including thread looped round and between said rods or pins to create the design.

The strip member or members preferably is or are moulded in synthetic plastics material.

The strip member or members is or are preferably provided with integral plugs to the other side thereof and the base board has holes in which such plugs are a friction fit to provide for the easy connection and removal of the strip or strips to and from the base board. The base board preferably has a plurality of said holes enabling the position or positions of the strip or strips to be selectively changed for changing of the thread design.

The thread may be included in the kit and may comprise a plurality of batches of different colours.

An embodiment of the present invention will now be described by way of example, with reference to the accompanying drawing wherein:

FIG. 1 is a plan view of a thread design created using strips and a kit according to the invention; and

FIG. 2 is a sectional elevation illustrating how a strip is connected to the base board in the design of FIG. 1.

In FIG. 1 there is shown in plan view a thread design constructed using strips and a kit according to the present invention. The design basically is constructed using three similar strips 2 arranged in a generally triangular configuration, to define the work area. The three strips may be considered as referenced A, B and C in order round the triangular configuration and as will be seen the adjacent ends of strips A and C are spaced slightly wider than the adjacent ends of A and B and B and C.

The strips 2 are firmly mounted on a base board 1 which in this example is of square configuration. Each of the strips 2 is mounted on the base board in the manner shown in FIG. 2 insofar as two circular plugs 5 to one side of the spine of the strip 2 are engaged in suitably dimensioned holes 6 in the base board 1. In fact plugs 5 are a friction fit in holes 6 so that the strip will be held firmly but can be removed manually. The board 1 is shown as having two holes 6 for the respective plugs 5 of the strips shown and indeed there is a similar arrangement for each of the strips A, B and C, but the board 1 could have a multiplicity of said holes to permit easier repositioning of the strips depending upon the thread design to be constructed.

To the other side of the spine of each strip 2 from plugs 5 there are spaced parallel pins or rods 4 which are moulded integrally with the spine and the plugs 5 of the strip 2 and each rod 4 has an enlarged portion in the form of an enlarged head 4A at the outer extremity thereof. These enlargements are to catch thread loops looped over the pins 4 in the construction of the design illustrated in FIG. 1.

The kit may be provided with suitable instructions for the formation of predetermined designs. For example, if the pins 4 are considered to be A1, A2, A3. . .A15, B1, B2, B3. . .B15, and C1, C2, C3. . .C15 for the threading pattern then the pattern shown in FIG. 1 can be made by threading A1, B1, C1, A2, B2, C2 and so on. Of course other patterns will have other sequences.

The strips 2 are one-piece mouldings and may when supplied in kit form be separate or be joined end to end ready for splitting into smaller lengths. The lengths of the strips used in constructing any particular design

need not be equal and furthermore the strips or some of them may be of curved configuration. If the plastics material is sufficiently flexible then the individual strips can be curved to desired configurations and held thus when applied to the board, but the pins or rods will be substantially rigid.

The heads 4A to the pins 4 preferably are mushroom shape in order to provide positive resistance to the slipping of thread loops over such heads 4A but other head configurations may be used.

Preferably the strip members are made in moulded plastics material for utility of production and economy of production, but they may be formed in other materials such as metal castings.

The thread design shown as having been formed in FIG. 1 is a two-dimensional design. By suitably shaping the strip members or suitably bending the strip members or providing a three-dimensional base three-dimensional designs can be produced. Furthermore strips can be arranged vertically in some cases.

In an alternative arrangement separable clips may be used for attaching the strips to the base board, such clips being adapted to wrap round the strip spine and plug into the holes in the base board in a manner similar to the plugs 5. Other methods of attachment of the strips to the base board may be used. For example, such strips may be adhered to the base board, or pinned to the base board by pins passing through holes in the spine.

The strip connected to the base board may be provided with more than two connecting devices such as the clips or plugs 5 which are engaged in appropriate holes in the base. The number of such connections with the base for each strip will depend upon the strip length.

The size of the base board will depend upon the thread design to be created thereon.

Each of the pins of the strips may be provided with more than one enlargement, and such enlargements would be opened lengthwise of the pin. This enables the design to be built up in layers one above the other, for improved effects. Furthermore the strip may be provided with two or more rows of pins lying at a construction which may be suitable for the creation of three-dimensional designs.

The distances between pins of any strip member need not be equal as shown in the drawings, but usually will be.

What we claim is:

1. A kit for making a variety of thread designs, the kit comprising

1 a base board having a multiplicity of plug receiving holes therein,

2 a plurality of thread receiving strip members, each strip member comprising

i a resilient spine

ii a plurality of spaced apart and substantially rigid thread receiving pin members attached to and protruding from one face of the spine, each pin member having a shank upon which is at least one enlarged portion spaced from the face of the spine for retaining in position a thread looped around the pin, and

iii the opposite face of said spine having a set of strip locating plugs projecting therefrom in the direction opposite to said pin members, the strip locating plugs being adapted to be inserted into selected holes in the base board whereby a choice of different positions and relative dispositions for the plurality of strip members is provided which define a work area across which the threads extend when looped around and between the pin members to form a thread design, and the spline being adapted to flex at least in the plane of the board when plugged into the board.

2. A kit according to claim 1 for making a variety of thread designs, wherein

said thread receiving strip members and their protruding pin members are integrally molded from a material which permits the strip members to flex under thread tension whereby the strip members can be caused to assume different configurations by thread tension on the protruding pin members.

3. A kit according to claim 1 for making a variety of thread designs, wherein the kit further includes

3. a batch of thread for looping around and between the pin members and across the work area to form a thread design.

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