Aug. 30, 1960 M. O. FIXEN 2,950,537

TOY FOR MAKING PICTURES AND DESIGNS

Filed July 11, 1957

FIG. 1

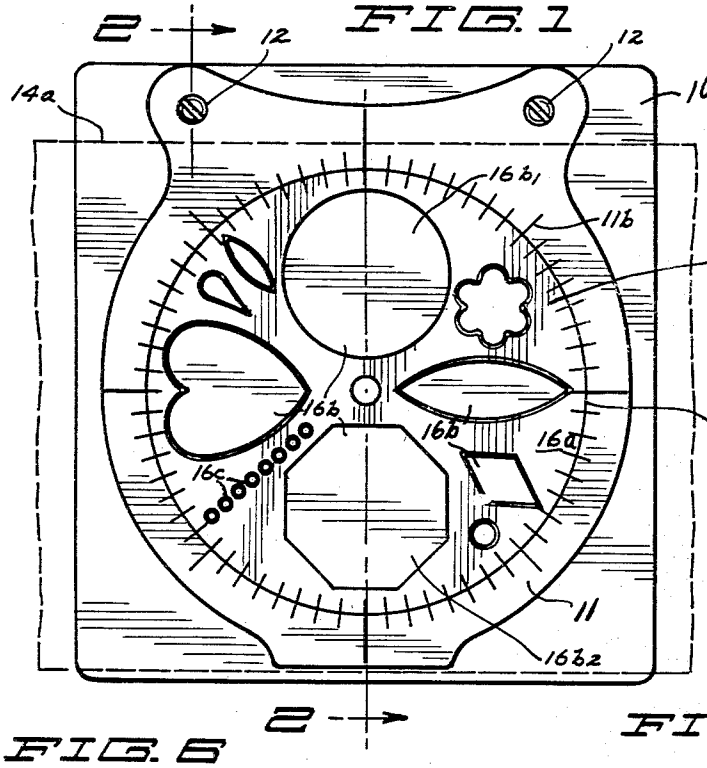


FIG. 2

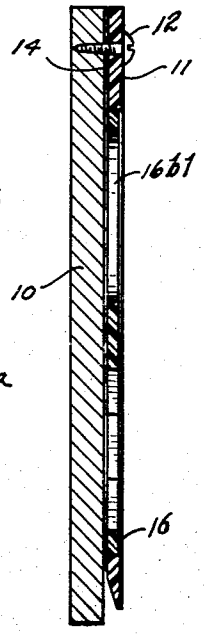


FIG. 3

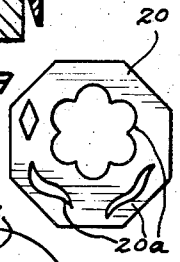
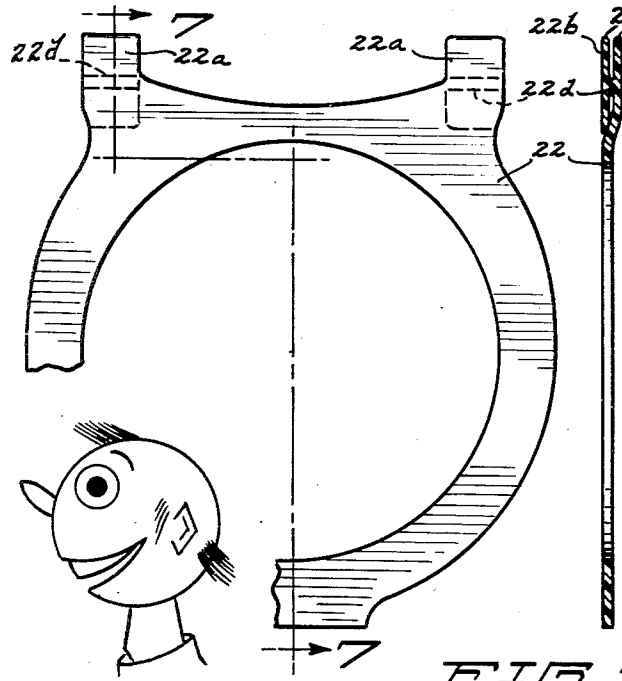


FIG. 6



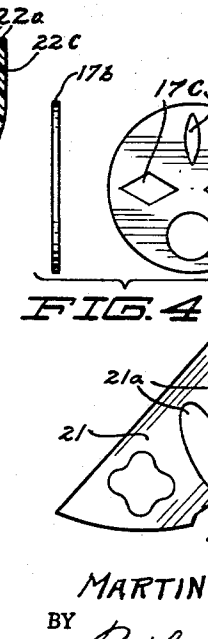


FIG. 4

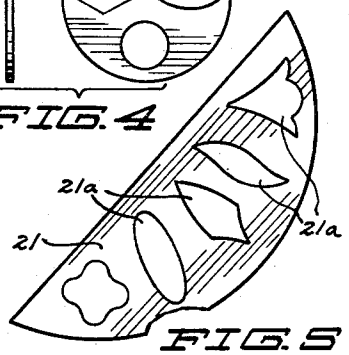


FIG. 5

FIG. 8

FIG. 7

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TOY FOR MAKING PICTURES AND DESIGNS

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2 Claims. (Cl. 33—174)

This invention relates to a toy device for making pictures or designs of various kinds.

It is an object of this invention to provide a device including a stationary plate-like member with a circular opening therethrough, a second member disposed in said opening and rotatable therein having a plurality of openings therethrough, said openings having both curved and rectilinear sides so that a piece of paper can be disposed beneath said member so that said member can be rotated to different positions, and figures traced on said paper by moving a pencil about the edges of said openings or portions of said edges to produce a great many designs or pictures of different kinds, one of said openings preferably being circular in form, and a second member disposed in said last mentioned opening being rotatable therein and having a plurality of openings of different shapes therein.

It is a further object of this invention to provide such a device as set forth in the preceding paragraph, in which said first mentioned member is secured to a base member having a top flat surface, said first mentioned member being spaced a short distance from said base and having a shoulder at one side against which the rectilinear edge of a piece of paper may be disposed, said paper being disposed between said first mentioned member and base.

It is another object of the invention to provide such a device as set forth in the above stated first object in which said second rotatable member also has one of the openings therethrough of polygonal form and another member fitting in said polygonal opening and having a plurality of openings therethrough.

It is still another object of the invention to provide such a device as set forth in said first stated object in which the first mentioned stationary member is provided with means for holding a piece of paper in place beneath said rotatable member, said means also acting to release said paper.

These and other objects and advantages of the invention will be fully set forth in the following description made in connection with the accompanying drawings in which like reference characters refer to similar parts throughout the several views and in which:

Fig. 1 is a top plan view of the device of this invention;

Fig. 2 is a vertical section taken substantially on line 2—2 of Fig. 1;

Fig. 3 is a plan view of a rather small plate-like member used having a plurality of openings therethrough;

Fig. 4 is a plan view of another plate-like member used, the same also having a plurality of openings therethrough;

Fig. 5 is a plan view of a segmental plate member adapted to be received in member 11;

Fig. 6 is a plan view of a modification comprising a stationary plate member used, the same being provided with means for holding a piece of paper in place;

Fig. 7 is a vertical section taken on line 7—7 of Fig. 6 as indicated by the arrows; and

Fig. 8 illustrates a picture which has been made with the device.

Referring to Figs. 1 and 2 of the drawings, the device comprises a base member 10, and while this might take various forms, it is shown as a block of rectangular form. While member 10 could be made of various materials, in the embodiment of the invention illustrated it is shown as being made of wood. Member 10 has a flat top surface to which is secured a member 11, the same being of plate-like form, and in the embodiment of the invention illustrated, the same is secured to base 10 by the spaced screws 12. Member 11 is of the form shown in Fig. 1 and the undersurface thereof is spaced slightly from the top surface of base 10, and while this might be variously accomplished, in the embodiment of the invention illustrated a rather thin plate member 14 is disposed under the top portion of member 11, the same having a rectilinear edge 14*a* which forms in effect a shoulder. Member 14 is held in place by the screws 12 which pass therethrough. Member 11 has therein a circular opening 11*a*. The wall of the opening 11*a* is at right angles to the flat top surface of member 11. The bottom edge of member 11 is beveled upwardly, as seen in Fig. 2. A member 16 is disposed in opening 11*a*, the same fitting therein and being rotatable in said opening 11*a*. Member 11 is provided adjacent opening 11*a* with a plurality of graduations 11*b*. Member 16 adjacent its edge is also provided with a plurality of graduations 16*a* which in some positions of member 16 align with the graduations 11*b*. Member 16 is provided with a plurality of openings 16*b* therethrough, said openings being of different shapes, the sides of said openings including both curved and rectilinear lines. Said sides are beveled so that they have surfaces sloping downwardly and inwardly. Plate 11 also has extending therethrough a plurality of small holes 16*c* illustrated as located on a line radial to member 11. One of the openings 16*b* which is specifically designated 16*b*1 is of circular form. Opening 16*b*1 is adapted to receive a circular plate member 17, the same having substantially the thickness of member 16. Member 17 is provided with a plurality of openings 17*c*, said openings being of different shapes and the sides thereof including both curved and rectilinear lines. Said sides are also beveled as are the sides of openings 16*b*. Another of the openings 16*b* which is specifically designated 16*b*2 is of polygonal shape. Said opening 16*b*2 is adapted to receive a member 20 which fits in opening 16*b*2 and is of substantially the same thickness as member 16. Member 20 is also provided with a plurality of openings 20*a* which extend therethrough and the sides of which also include both curved and rectilinear lines. Said sides are also beveled as are the sides of openings 16*b*. A member 21 is also provided which is of a shape to partially fit within opening 11*a*, the same being in the form of a segment. Member 21 also has a plurality of openings 21*a* extending therethrough, the sides of said openings also including curved and rectilinear lines, said sides also having downwardly beveled edges.

In Fig. 6 is shown a modification of member 11. Said modification includes a member 22 which is substantially of plate-like form, the lower portion thereof being identical with the lower portion of member 11. The upper portion of member 22 has projecting parts 22*a* formed as spaced connected tabs which include the lower part 22*b* and an upper part 22*c*, said upper part being connected to part 22*b* by a narrow neck portion 22*d*. Member 22 will preferably be made of plastic material which is resilient. The side portions of the neck portion 22*d* are rectilinear.

In the operation of the device shown in Figs. 1 and 2, the same will be placed on a suitable support, such as a table. A sheet of paper will be disposed between mem-

ber **11** and the top of base **10** and a rectilinear edge of said sheet will be placed against the inner edge of member **14**. This will definitely locate said sheet. The rotatable member **16** will be disposed in any suitable position and lines will be drawn on said sheet of paper by moving a pencil about the wall of one of the openings **16***b*. The pencil need not be moved entirely about said wall as in making many figures it will only be moved about a certain portion of said wall. Plate **16** can then be rotated to bring a portion of another opening in position so that a line drawn about the wall thereof will cooperate with the line first drawn. This operation can be continued until the desired figure is completed. Member **17** can be rotated in opening **16***b***1** to bring the various openings **17***c* into the desired position to add to the figure started. Plate **16** can be rotated so that the openings in member **20** can be used to form the desired lines. Pictures or figures can also be constructed using the whole or parts of a plurality of the openings shown in member **16**. One of such pictures are shown in Fig. 8. Member **16** can be rotated to bring one or both openings adjacent lines already drawn and member **17** can be rotated into the desired position to use a pencil in some of the openings **17***c* or **20***a* to get the desired results. Holes **16***c* can be used for receiving a pencil to rotate member **16** or to make concentric circles. It will be seen that an almost endless number of pictures and designs may be made. While members **11** and **16** could be made of various materials, in practice they have been made of plastic.

Member **16** can be removed from the opening in member **11** and member **21** substituted therefor. Pictures or designs can then be made using the straight edge of member **21** and one or more of openings **21***a*.

The members **11** and **16** can be used without the base member **10**. In the form shown in Fig. 6, the piece of paper will be placed beneath member **22** which will have members **16** therein and the paper can be disposed with one straight edge against the lower sides of the neck portions **22***d*. Parts **22***c* can be pressed upon and the lower ends thereof will be raised so that the paper can be disposed thereunder. When said pressure is relieved, parts **22***c* will return to the position shown and the paper will be clamped between such parts and the main portion of member **22**.

It will thus be seen that I have provided a very simple and yet a very useful and desirable toy. The same can be used for people of all ages although it is principally designed for children and younger persons. The operation of the device is interesting and entertaining and one can become quite skilled in producing original pictures. The device has been amply demonstrated in actual practice, found to be very successful and efficient, and procedure is under way to market the same commercially.

The beveled edges of the openings **16***b*, **20***a*, **17***c*, and **21***a* facilitate the use of a pencil in said holes. The beveling forms a thin edge against which the pencil is placed.

It will of course be understood that various changes may be made in the form, details, arrangement and proportions of the parts, without departing from the scope of applicant's invention, which, generally stated, consists in a device capable of carrying out the objects above set forth, in the parts and combinations of parts disclosed and defined in the appended claims.

What is claimed is:

1. A device for drawing designs having in combination, a plate member having a circular opening therein, a member having a plurality of various shaped openings therein being rotatably disposable in said opening, a pair of transversely spaced upper tabs extending upwardly from said plate member being integral therewith and having portions vertically offset from the plane of said plate member, a second pair of tabs spaced under said first tabs and being in the plane of said plate member, resilient neck portions substantially centrally longitudinally of said upper tabs connecting said upper and lower tabs, said lower tabs having their inner ends respectively abut the shoulders formed by said offset portions whereby when the free ends of said upper tabs are depressed, said offset portions and the entire lower portion of said plate member are raised away from said inner ends of said lower tabs to permit the insertion therebetween of the upper end portion of a sheet of writing material to be placed between said spaced tabs for gripping engagement between said lower tabs and said shoulders when the free ends of said upper tabs are released.

2. A device for drawing designs having in combination, a resilient plate member having a circular opening therein, a member having a plurality of various shaped openings therein being rotatably disposable in said opening, said plate member having an upwardly extending portion offset from the plane of said plate member, said offset portion having upwardly projecting transversely spaced tabs, said tabs being each shaped in vertical longitudinal section with the lower sides of said tabs being in the same plane with said plate member and the inner ends of said lower sides abutting the shoulders formed by said offset portion whereby the upper portion of a sheet of writing material may be disposed between the inner sides of said tabs and gripped against said shoulder by the lower side of said tabs.

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