

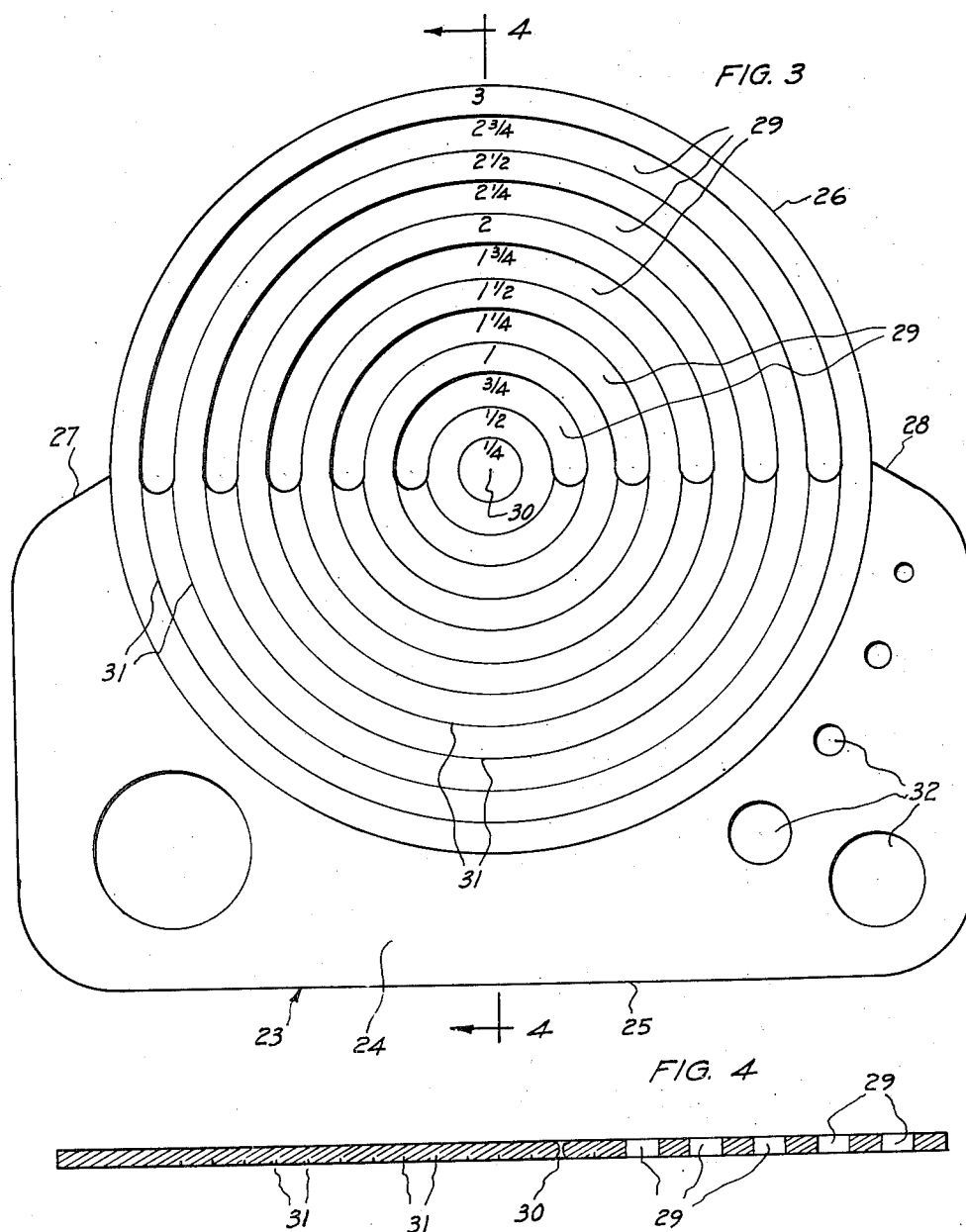
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DRAFTSMAN'S TEMPLATE

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DRAFTSMAN'S TEMPLATE

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4 Claims. (Cl. 33—174)

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My present invention relates to a template for use in drawing arcs as, for example, in highway layout work and in drafting in order that the draftsman may have a single, convenient instrument that may be easily and accurately used in drawing arcs of substantial length and entire circles, if desired, of a substantial range of radii.

In many instances, arcs and circles of different radii have to be so frequently drawn that some instrument is required to expedite the draftsman's work. While templates have been proposed, these have not been sufficiently practical to replace the curves commonly used. Such curves enable an arc to be drawn, but are objectionable because of the number of curves required to give the desired range and because of the inconvenience incidental to their use.

In accordance with my invention, I provide a template consisting of a body, preferably of transparent stock, having a plurality of concentric arcuate slots extending therethrough. The width of each of the slots is equal to a predetermined unit of measurement and the slots are preferably uniformly spaced from each other. I provide the body with a plurality of arcuate indicia, pairs of which are spaced apart a distance equal to the unit of measurement and which extend from one end to the other of each slot substantially in alinement with its inner and outer edges. Preferably, the slots are slightly wider than said unit in order that arcs drawn along their inner and outer edges will register with the corresponding indicia and be spaced apart a distance equal to that unit.

In the preferred embodiment of my invention, the slots are alternately disposed on opposite sides of a diameter so that while two sets of slots are established, the slots of each set are spaced apart a substantial distance. This fact, together with the fact that the adjacent ends of the slots of each set terminate short of each other ensures rigidity of the template and accuracy in its use.

In the accompanying drawings I have shown illustrative embodiments of my invention from which these and other novel features and advantages of my invention will be readily apparent.

In the drawings:

Fig. 1 is a plan view of a template in accordance with my invention.

Fig. 2 is a section along the lines 2—2 of Fig. 1.

Fig. 3 shows another embodiment of my invention, and

Fig. 4 is a section along the lines 4—4 of Fig. 3.

In the embodiment of my invention shown in

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Figs. 1 and 2, I have indicated generally at 10 a body which may most conveniently be of a transparent plastic or other transparent material and which is shaped to establish a base 11 having a straight bottom edge 12 and a semi-circular projection 13 intermediate the ends of its upper edge thereby establishing shoulders 14 and 15 which define a diameter disposed diagonally with respect to the straight edge 12 of the base 11.

I form the body with a plurality of slots 16 which are arcuate with respect to the center 17 of the projection 13. The slots 16 are of the same width and are preferably uniformly spaced from each other. The body 10 also has pairs of arcuate indicia, shown as grooves 18 extending from one end to the other of each slot and substantially in alinement with its inner and outer edges. The grooves 18 of each pair are spaced from each other by a predetermined unit of measurement and the pairs of grooves are preferably spaced from each other a like distance. In the drawings, the grooves are shown as being spaced $\frac{1}{4}$ inch from each other. In practice, the slots 16 are slightly wider to permit an arc to be drawn along either its inner or its outer edge that is in alinement with the corresponding groove associated therewith.

I have shown the slots 16 as alternately arranged on opposite sides of the diameter 19 established by the shoulders 14 and 15 so that two sets of slots are established with the slots of each set being wholly located on one side of that diameter. By this arrangement, I am able to provide a template in which the slots of each set are separated from each other by a multiple of the distance between the indicia so that a sufficient amount of stock is available to ensure that the template is sufficiently rigid for accurate use.

It is, of course, desirable to have the slots as long as possible and I have found that they may be in the order of 165° without weakening the template. In practice, I prefer that the adjacent ends of the slots of both sets be spaced from each other. In practice, these are spaced substantially 15° apart with their extremities spaced substantially $7\frac{1}{2}^\circ$ from the diameter 19. One set of opposite ends of the slots of both sets define a diameter 20 in parallel with the straight edge 12 while the other set of opposite slot ends define a diameter 21. By this construction, I provide adequate stock between the adjacent ends of each set of grooves to further ensure that my template is suitably rigid.

The base 11 may be provided with other indicia, useful to the draftsman, such as the set

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of holes 22 which enable complete circles of relatively small diameter to be drawn.

In Figs. 3 and 4, I have shown a modification of my invention in which the body 23 has a base 24 having a bottom straight edge 25 and a semi-circular projection 26 intermediate the ends of its upper edge thereby establishing shoulders 27 and 28.

The body 23 has a set of slots 29 arcuate with respect to the center 30 of the projection 26. The body 23 also has pairs of arcuate indicia in the form of grooves 31 which are of a predetermined width and which are spaced uniformly from each other. A pair of grooves extends from one end of each slot to the other substantially in alinement with its inner and outer edges and preferably the width of each slot is slightly increased to enable a line drawn along either edge to register accurately with the corresponding groove associated therewith. The base 24 is also provided with a set of holes 32 for use in drawing complete circles of various small diameters.

A template in accordance with my invention is easy to use and enables the draftsman to do his work with increased accuracy and convenience. He is able to draw an arc of substantial length without repositioning my template and should it be necessary to increase its length to a full circle, the template may be accurately repositioned because of the arcuate indicia associated with each slot which may be easily and accurately disposed in registry with a completed arc. The centers enable center points on the work to be accurately located and while I provide a sufficient number of slots so that arcs of a wide range of radii are available, my template is compact and rigid enabling arcs to be quickly and easily drawn so that the draftsman has available at all times a single instrument which eliminates the inconvenience of having to maintain a substantial number of curves on hand.

What I therefore claim and desire to secure by Letters Patent is:

1. A template comprising a body of transparent stock having a plurality of concentric arcuate slots extending through said body, said slots being radially spaced from each other, and said body having a plurality of concentric arcuate lines, pairs of which are spaced apart and extend from one end of each slot to the other end thereof substantially in alinement with its inner and outer edges.

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2. A template comprising a body of transparent stock having a plurality of concentric arcuate slots extending through said body, the width of each slot being such that arcs drawn along its inner and outer edges are radially spaced apart by a predetermined unit of measurement, said slots being uniformly radially spaced from each other, and said body having a plurality of concentric arcuate lines, pairs of which are spaced apart a distance equal to said unit and extending from one end of each slot to the other end thereof and being spaced relative to its inner and outer edges so that a line registers with a line drawn along either edge thereof.

3. A template comprising a body of transparent stock having a plurality of concentric arcuate slots extending through said body and spaced radially uniformly from each other but being alternately disposed on opposite sides of a diameter so that two series of slots are established, and said body having a plurality of pairs of concentric arcuate lines, each pair of which extends from one end of a slot to the other end thereof substantially in alinement with its inner and outer edges.

4. A template comprising a body of transparent stock having a plurality of concentric arcuate slots extending through said body and spaced radially uniformly from each other but being alternately disposed on opposite sides of a diameter so that two series of slots are established, said slots being of such a width that arcs drawn along the inner and outer edges of any slot are spaced apart by a predetermined unit of measurement, and said body having a plurality of pairs of concentric arcuate lines, each pair of which extends from one end of a slot to the other end thereof and is spaced relative to its inner and outer edges to establish a continuation of a line drawn along either of said edges, whereby the slots are successively spaced from each other a distance related to said unit and the slots in each series are successively spaced apart by a multiple thereof.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,604,232	Lipke	Oct. 26, 1926