Dec. 24, 1940. A. E. ROYLE 2,226,349

DECORATIVE TREE

Filed March 21, 1939 2 Sheets-Sheet 1

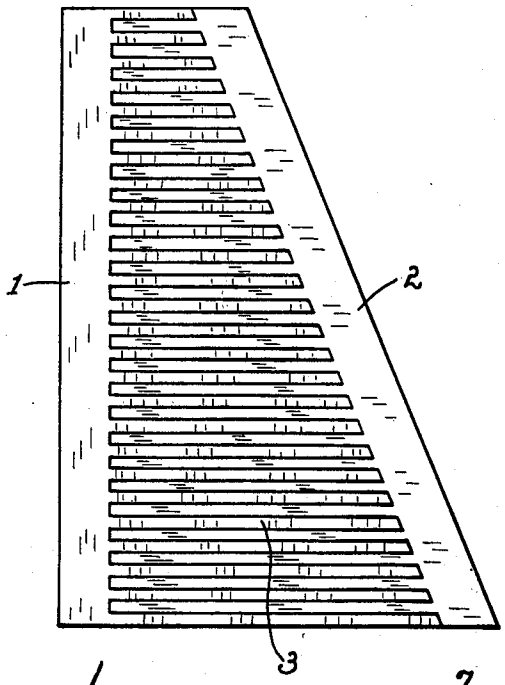

Fig-1

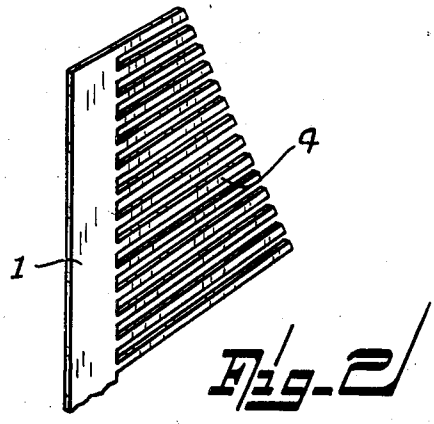

Fig-2

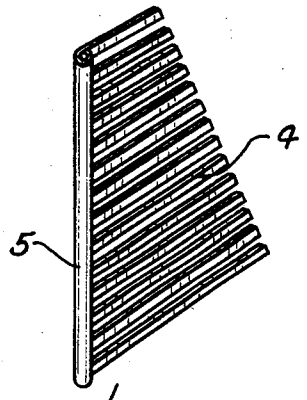

Fig-3

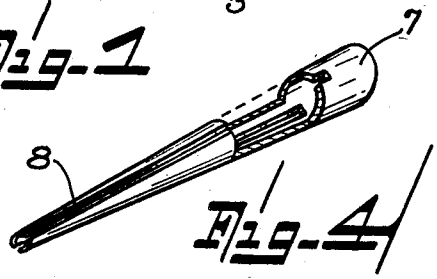

Fig-4

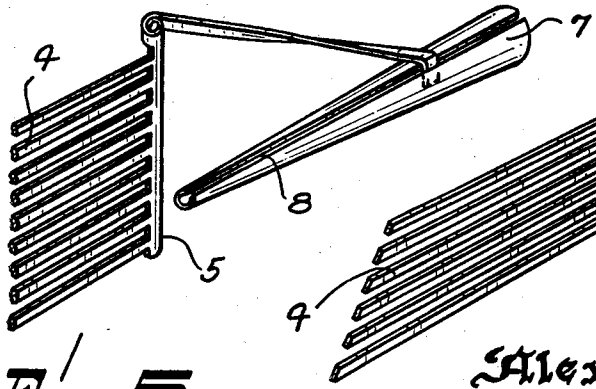

Fig-5

Fig-6

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DECORATIVE TREE

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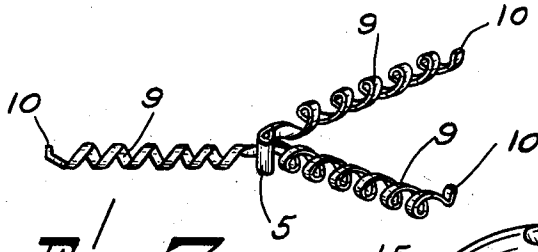

Fig. 7

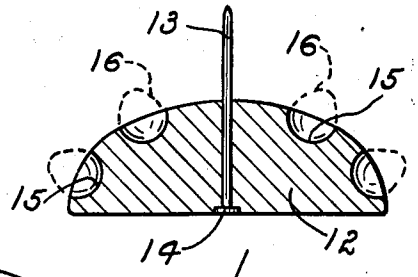

Fig. 9

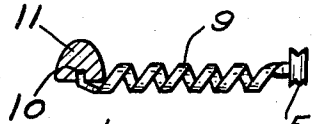

Fig. 8

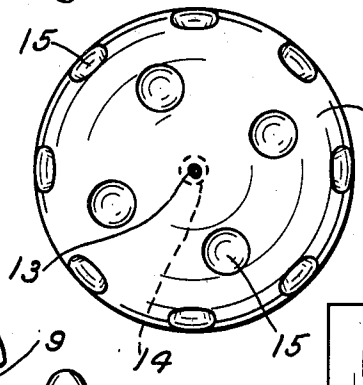

Fig. 10

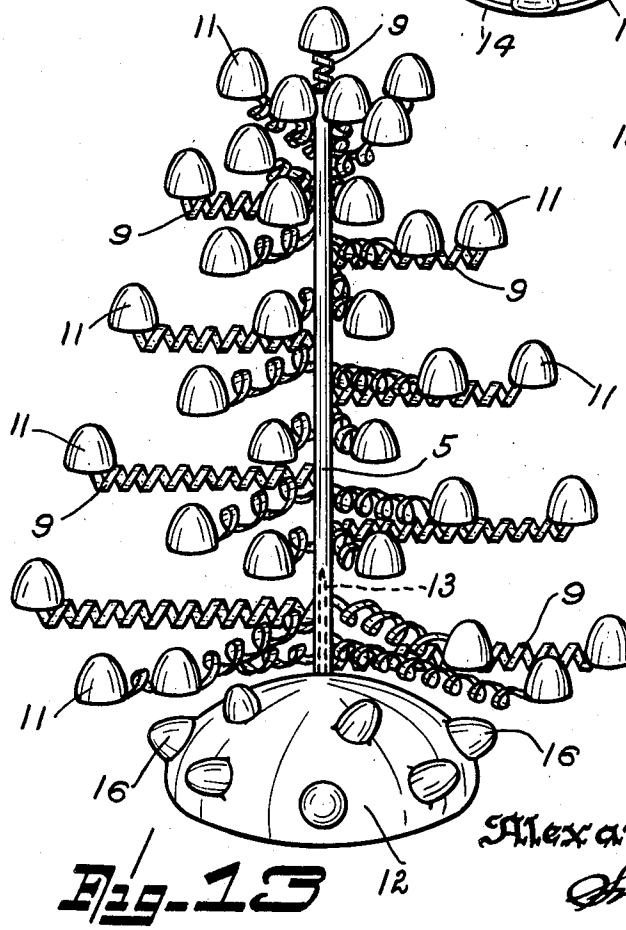

Fig. 13

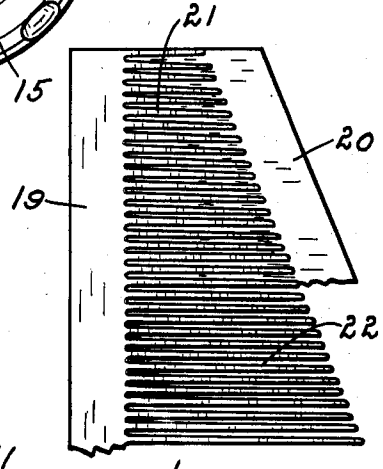

Fig. 11

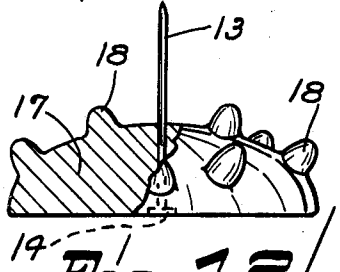

Fig. 12

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UNITED STATES PATENT OFFICE

2,226,349

DECORATIVE TREE

Alexander E. Royle, Seattle, Wash.

Application March 21, 1939, Serial No. 263,209

3 Claims. (Cl. 41—15)

My present invention relates to an improved decorative tree which is preferably made up in miniature sizes, the dissociated parts of which are made up in a small compact package for sale. These dissociated parts are adapted to be manually assembled, under instructions, by amateurs, thus providing entertainment and novelty for the person or persons assembling tree parts, and also providing an ornamental and decorative tree.

In carrying out my invention I utilize a sheet of thin, pliant, and somewhat resilient metal, in which sheet are stamped guiding kerfs so that the sheet may be flexed and separated at the kerfs into two blanks, one or both of which blanks may be utilized in the formation of a tree-trunk or tubular stem having a uniform series of tines. In the package, as sold, a hand tool or mandrel is enclosed, by means of which the tines may be converted into curled or twisted branches for the tree. A suitable base, and appropriate decorative features or ornaments are also included in the package, as will be later described.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention, and the method by which the tree is made, but it will be understood that changes and alterations may be made in these exemplifying drawings, within the scope of my claims, without departing from the principles of the invention.

Figure 1 is a plan view of a thin sheet metal plate having kerfs of channels stamped in its faces, from which two blanks may be formed by separating the kerfs; and Figure 2 is a perspective view of one of the blanks after it has been separated, as by hand, from another blank of the sheet or plate, part of the separated blank being broken away for convenience of illustration.

Figure 3 is a perspective view of a blank with its marginal strip rolled into a tubular stem, which forms the main, upright stem or trunk of the completed tree.

Figure 4 is a perspective view, partly in section, of one form of a hand tool mandrel which is utilized in curling the branches of the tree.

Figure 5 is a perspective view showing the initial step in employing a mandrel of another type to curl a branch of the tree; and Figure 6 is a similar view showing the completion of the method of curling the tree-branch, the mandrel being in position for release from the curled branch.

Figure 7 is a perspective view at the top of the tree-stem showing the relation of three radially arranged and curled branches, each of which is fashioned with a supporting lug at its outer end.

Figure 8 is a detail view showing a portion of the stem, together with a curled branch, and an ornament attached at the free end of the branch.

Figure 9 is a sectional detail view of the tree-base or support, showing a supporting pin or nail for the tree-stem, and also showing sockets in the base to receive ornaments, shown by dotted lines.

Figure 10 is a plan view of a tree-base showing the exterior sockets therein to receive ornaments, as varied colored gum drops.

Figure 11 is a modified form of the sheet or metal plate with the kerfs stamped therein.

Figure 12 is a slightly modified form of the tree-base, partly in section to show the integral nodules on the base in lieu of sockets to receive the ornamental gum drops of Figure 9.

Figure 13 is a completed tree showing the curled branches and decorations on their ends, and the ornamental features of the base of the tree.

In carrying out my invention I employ a thin plate or sheet of suitable material that is capable of being stamped or pressed in a suitable machine, to provide the zig-zag kerfs shown in Figure 1 and also in Figure 11, which kerfs terminate at a suitable distance from opposite edges of the plate to form marginal edges or flat bars. I have found that sheet metal, treated paper, plastics, or other materials which will take a curl may be used. In some instances even wire may be used.

The metal is pliant and somewhat resilient so that the tines which form the branches of the tree, when curled may wobble or quiver similar to the action of a spring.

In Figure 1 I have shown a sheet of metal having a straight marginal edge 1 and a diagonal edge 2, and between these edges or flat bars, the zig-zag kerfs are indicated at 3, and it will be noted that the longitudinal kerfs extending transversely of the plate, increase in length from the top of the plate toward the lower end of the plate. By grasping the opposite flat bars 1 and 2 in the hands and flexing the plate, it will be understood that the plate may be separated into blanks, one of which is shown in Figure 2 as comprising a flat edge bar 1 and a series of parallel tines 4, the top tine being the shortest and the bottom tine being the longest, in order that the length of the tree-branches will decrease from the bottom toward the top of the tree.

The flat marginal edge or flat bar 1 is curled or turned from end to end by a suitable tool to form the trunk or tubular stem 5 of the tree, and then

the straight tines 4 are curled to form the branches of the tree, a partially completed branch 6 being shown in Figure 6.

For curling the tines I employ a suitable hand-tool, or other device, as 7, which is a tapered mandrel having a bifurcated end 8, or slot 8', and the tines are sucessively curled by the use of this tool. The free end of a tine is inserted in the bifurcated tool 7 as in Figure 5; then the tine is rolled upon the mandrel while the latter is being turned from position of Figure 5 to position of Figure 6.

Starting at the top of the blank in Figure 3, the successive tines, as indicated in Figure 7 are turned or curled to form the branches 9, 9, of the tree and the branches are spaced apart in radial relation to the tree-stem, in imitation of a tree with its branches, as shown in Figure 13.

For ornamental purposes, the ends of the curled branches 9 are bent upwardly at 10 to form supporting lugs for confections, as gum drops, which are preferably of varied colors, and are pressed onto the lugs to provide a firm seat thereon. The gum drops, or other suitable confections are indicated at 11 in Figure 13, and it will be understood that various other ornaments or decorative features may be hung upon the branches of the tree.

To provide a stable support for the tree I preferably use a hemispherical base 12, which may be of candy, or other suitable material, and the base is formed with a wide flat bottom face or bearing support to prevent accidental tipping of the tree. In attaching the tree to the base a center pin or nail 13 having a head 14 is embedded in the base, and the lower end of the tubular stem of the tree is forced down over the projecting upper end of the pin 13, and the tubular stem fits neatly on the pin with sufficient friction to prevent accidental separation of the parts.

In Figures 9 and 10 the exterior face of the hemispherical base is shown as provided with a number of sockets 15 extending over the face of the base, and these sockets are filled with elliptical or egg-shaped confections as 16, indicated by dotted lines in Figure 9. In Figure 12 a modification of this arrangement of the ornamented base is shown wherein the base 17 has a number of decorative nodules 18 fashioned integrally therewith. In either of the two forms, the base and its ornamental or decorative features, different and contrasting colors are used, thus insuring a pleasing effect for the trimmed tree.

In Figure 11 where a slight modification is shown, the edge bars 19 and 20 of the kerfed plate or sheet, form the boundaries for the zig-zag kerfs 21, and the two blanks fashioned from this plate have narrow tines 22 that are rounded at their ends and the tines are tapered down to their free ends somewaht similar to a comb.

The foregoing description and the accompanying drawings are believed to clearly disclose a preferred embodiment of my invention, but it will be understood that this disclosure is merely illustrative and that such changes in the invention may be made as are fairly within the scope and spirit of the following claims.

I claim:

1. A decorative tree comprising a hemispherical base having exterior pockets adapted to receive decorative features, and an upright center-pin mounted in the base, a tubular tree-stem mounted on the center-pin, said stem having radially extending branches, and supporting lugs at the ends of said branches adapted to form seats for ornaments.

2. A decorative tree comprising a hemispherical base having exterior receptacles for decorative features, and an upright center-pin mounted in the base, a tubular metal tree-stem mounted on the center-pin, said stem having radially extending, integral and flexible branches, and supporting lugs at the ends of the branches adapted to form seats for ornaments.

3. A decorative tree comprising a base having an upright center-pin, a tubular tree-stem mounted on the center-pin, said stem having straight, integral radiating branches, said branches each having a multiplicity of uniform curls extending from end to end along the longitudinal axis of the branch, and lugs at the outer ends of said branches adapted to form seats for ornaments.

ALEXANDER E. ROYLE.