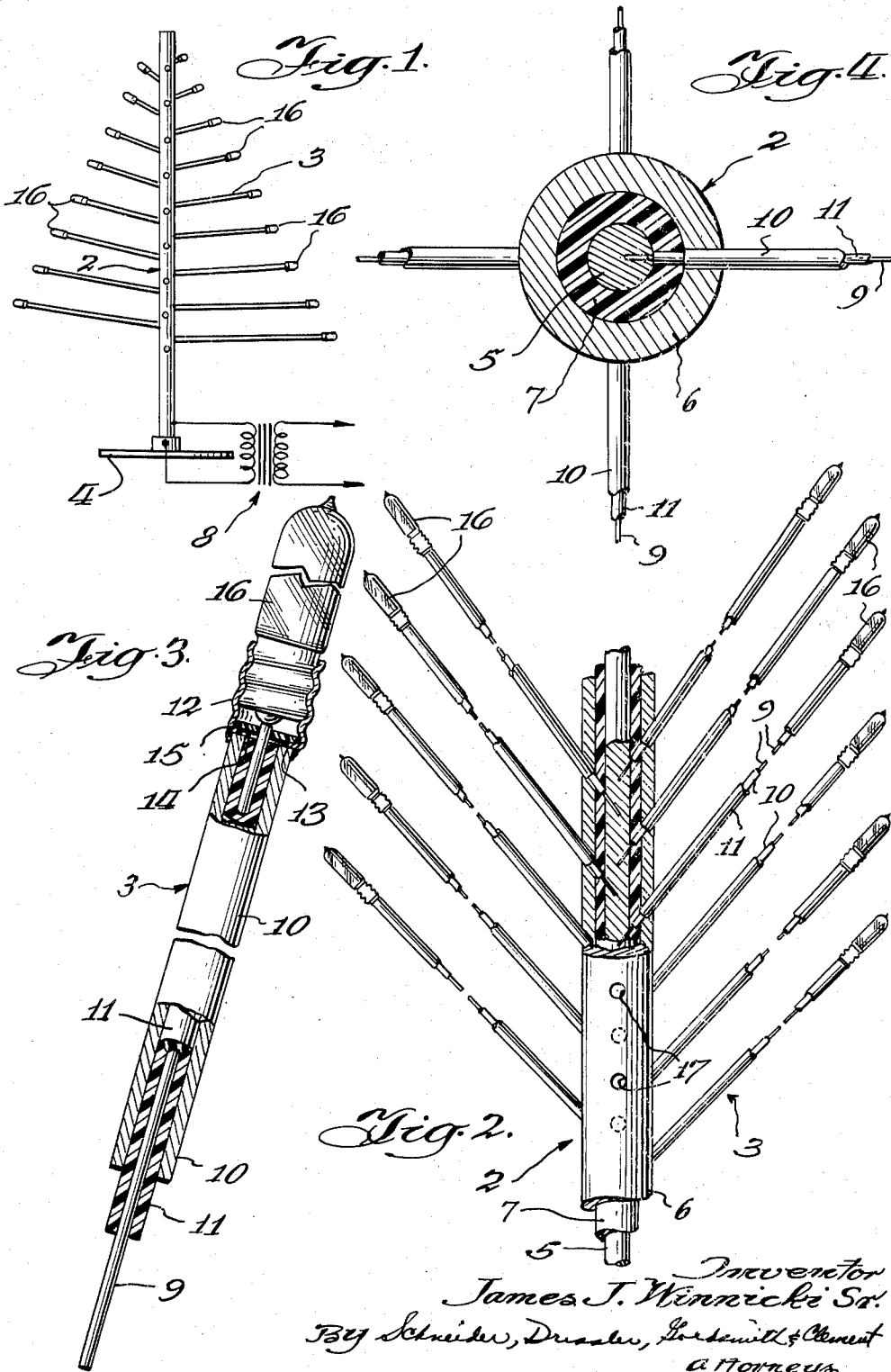


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J. J. WINNICKI, SR  
SYNTHETIC CHRISTMAS TREE

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**SYNTHETIC CHRISTMAS TREE**

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2 Claims. (Cl. 240-10)

This invention relates to synthetic Christmas trees made of metal, and is particularly concerned with means for applying electric lights to such trees.

In accordance with the present invention, the tree and its branches are made of metal, preferably aluminum, with each member comprising inner and outer conductors separated by suitable insulation. The trunk of the tree is provided with a plurality of holes each having a diameter equal to the outer diameter of the branch. One end of each branch is inserted through one of the holes in the trunk to secure the branches in the desired relationship to the tree trunk. The tip of each branch is stripped of its insulation so as to make a good electrical contact between the inner conductor of each branch and the inner conductor of the trunk. The outer conductor of each branch is in electrical contact with the outer conductor of the trunk. In each branch a washer is secured to the outer end of the inner conductor of the branch to retain the inner conductor in place and to insulate it from the adjacent outer conductor.

Each branch of the tree serves to hold an electric light. A threaded socket is secured to the outer end of the outer conductor of the branch for reception of a light bulb of proper voltage. A transformer cuts the current down so that the light may work on any voltage up to 28 volts. Any light bulbs that burn out may be replaced without removing the branch from the tree. The branches may be wrapped in metal foil, preferably aluminum, that is arranged to simulate the foliage of the tree.

The structure by means of which the above mentioned and other advantages are attained will be described in the following specification, taken in conjunction with the accompanying drawings, in which:

FIGURE 1 is a diagrammatic showing of a metal tree with lights attached thereto in accordance with the invention;

FIG. 2 is a fragmental view, partly in section and partly in elevation;

FIG. 3 is a view, partly in section and partly in elevation, of a branch for the tree; and

FIG. 4 is a cross sectional view through the tree trunk.

The tree of the present invention comprises a trunk 2 having a plurality of branches 3 projecting therefrom. In FIG. 1, the trunk 2 is mounted in a base 4 adapted to support the tree in standing position, but it will be understood that such support is not necessary. The trunk and branches may be fashioned into a wall decoration or a hanging decoration supported in any suitable manner.

Trunk 2 comprises an inside conductor 5 of any suitable metal and an outside conductor 6 spaced therefrom. Although the conductors may be of any suitable metal, aluminum is preferred because of its weight. Conductors 5 and 6 are separated by insulation 7. The insulation may be the space between the inner and outer conductors but generally comprises a layer of any suitable insulating material. The insulating material is preferably in the form of a tubular plastic sheath that fits between the inner and outer conductors and is preferably adhered to both. Although the insulation may comprise short sections spaced from each other, it is preferred to use a continuous sheath of the same length as the length of the outer conductor. A transformer 8 steps the house current down to provide a voltage below

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28 volts so that the lights may be plugged in any conventional outlet.

Branches 3 are all alike, so only one of them will be described. Each branch comprises an inner conductor 9 and an outer conductor 10 spaced therefrom by insulation 11. The conductors may be of any suitable material, but are preferably made of aluminum because of its weight. The insulation may be the space between the conductors or may be of any suitable material. The insulation is preferably in the form of a tubular plastic sheath that fits between conductors 9 and 10 and is preferably adhered to both of said conductors. The insulation may be in the form of short strips spaced from each other, but it is preferred to have a continuous tubular sheath of substantially the same length as the length of the outer conductor. The insulation is stripped back from the inner conductor 9 adjacent the end of the branch to be secured to the tree trunk, as hereinafter described.

A screw threaded socket 12 is fixed to the opposite or outer end of outer conductor 10. The socket may be integral with outer conductor 10, but preferably is formed as a separate member and is soldered to the end of the outer conductor. The base 13 of socket 12 is provided with an aperture 14 larger than the diameter of inner conductor 9 which extends therethrough. A washer 15 is provided with an aperture the same size as the diameter of inner conductor 9. One end of the inner conductor passes through the aperture in the washer. The washer retains the inner conductor in place and insulates it from the outer conductor. A light bulb 16 that may be operated with a voltage no larger than 28 volts is threaded into each socket.

The trunk 2 is provided with a series of holes 17 that may be arranged in any desired pattern. Each hole 17 has a diameter equal to the outer diameter of the branch and extends through the outer conductor and the insulation between the outer conductor and the inner conductor. If desired, the diameter of the hole 17 may be reduced slightly in the insulating material. Each outer conductor of the branch has a tight fit with the hole 17 in the trunk thereby forming a good electrical connection between the outer conductor of the branch and the outer conductor of the trunk. The inner conductor of each branch forms a good electrical connection with the inner conductor of the trunk. The branches are firmly supported in the holes 17 and will not accidentally fall out. If one of the light bulbs 16 burns out it is not necessary to replace or even remove the branch. The light bulb may be replaced merely by unscrewing the bulb from the socket 12 and screwing a new bulb in its place.

Although I have described a preferred embodiment of the invention in considerable detail it will be understood that the description thereof is intended to be illustrative, rather than restrictive, as many details of construction may be modified or changed without departing from the spirit or scope of the invention. Accordingly, I do not desire to be restricted to the exact structure disclosed.

I claim:

1. A simulated tree comprising a metal trunk and a plurality of metal branches projecting from said trunk, said trunk having an exposed outer surface of metal comprising an outer conductor and an inner conductor within and insulated from said outer conductor, said outer conductor having a plurality of holes extending there-through, each of said branches including an inner conductor extending through one of said holes into contact with said first mentioned inner conductor and an outer conductor having one end thereof fitting within said one hole to provide contact with said first mentioned outer conductor, a socket connected to said second mentioned outer conductor, and means insulating said second men-

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tioned inner conductor from said second mentioned outer conductor and said socket.

2. A simulated tree comprising a metal trunk and a plurality of metal branches projecting from said trunk, said trunk having an exposed outer surface of metal comprising an outer conductor, an inner conductor within said outer conductor and a tubular insulating sheath separating said conductors, said outer conductor and said tubular insulating sheath having a plurality of holes extending therethrough, each of said branches including an inner conductor extending through one of said holes having one end thereof fitting within said one hole to provide contact with said first mentioned inner conductor and an outer conductor having one end thereof fitting within said one hole to provide contact with said first mentioned outer conductor, a socket connected to said second mentioned outer conductor, and means insulat-

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ing said second mentioned inner conductor from said second mentioned outer conductor and said socket.

#### References Cited by the Examiner

##### UNITED STATES PATENTS

1,613,386	1/27	Ekdahl	240—10
2,188,529	1/40	Corina	240—10
2,467,954	4/49	Becker	240—2.18
2,694,182	11/54	Edlen et al.	339—97
2,857,506	10/58	Minteer	240—10
3,048,780	8/62	Diambra et al.	339—97

##### FOREIGN PATENTS

708,209	4/54	Great Britain.
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