May 23, 1950 W. J. KORTH ET AL 2,508,676

DECORATIVE ORNAMENT AND FIRE SAFETY DEVICE

Filed Dec. 10, 1948

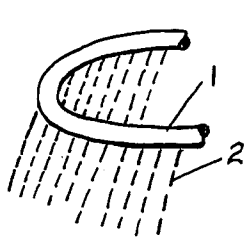


Fig 3

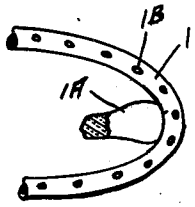


Fig-2

Fig-1

INVENTORS
WILLIAM J. KORTH
WILLIAM J. KENDER

BY David H. Eckroad
Attorney

Patented May 23, 1950 2,508,676

UNITED STATES PATENT OFFICE

2,508,676

DECORATIVE ORNAMENT AND FIRE SAFETY DEVICE

William J. Korth, Cleveland, and William J. Kender, Madison, Ohio

Application December 10, 1948, Serial No. 64,544

3 Claims. (Cl. 169—5)

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Our invention relates to a new design and improvement in a decorative fire extinguisher.

One of the objects of the invention is to provide a device in the form of an automatic fire extinguisher, more particularly for use on Xmas trees.

Another object of the invention is to provide a device having a chamber adapted for containing a fire extinguishing liquid and such chamber being connected by means of hollow pipes to a circular hollow ring with openings through its under surface as a spraying means.

Another object of the invention is to provide a device having a series of pipe coils arranged in a circular or cone-shaped form, adapted to contain a liquid easily and quickly expanded by means of heat and connected by means of a valve to another overhead, or superimposed, liquid chamber.

A further object of the invention is to provide a device in the form of a decorative fire extinguisher, having two chambers, or means adapted for containing a fire extinguishing liquid and such chambers connected by means of a valve.

A further object of the invention is to provide a device in the form described in the preceding paragraph, in which the lower or tubular form chamber contains a chemical in liquid form that readily and quickly expands when heat is applied, resulting in pressure which opens a valve connection to another, or upper chamber, containing a fire extinguishing liquid and causes such liquid to be forced out through a connected spraying means to extinguish the fire causing the expansion of such liquid chemical.

Another object of the invention is to provide a device in which the two liquid chambers may be combined into one chamber to contain a fire extinguishing liquid chemical for the purposes previously described.

Another object of the invention is to provide a device in which the lower, or coil chamber, is eliminated and the upper chambers retained which would contain a fire extinguishing liquid chemical acted upon directly by heat and with the results as previously described.

Another object of the invention is to provide a device in other forms of structure but retaining the basic features and spirit of the invention.

Another object of the invention is to provide a device as described that is also decorative for use on Xmas trees and other objects and at the same time provides an automatic fire extinguishing means.

Other features and objects of this invention will become apparent by a reading of the description and a reference to the accompanying drawings in which:

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Fig. 1 is an elevation view in perspective of the invention or device.

Fig. 2 shows the under surface of the sprinkling or spraying, ring in segment.

Fig. 3 shows the spraying ring in segment.

Referring more in detail to the drawings: 1 is a circular hollow ring, or tubing, with the perforations 1B through which liquid is sprayed, or sprinkled and the means 1A through which the liquid 2B in the chamber 2 is forced into 1 and out through 1B. 2A indicates the liquid level in 2. 3 is a valve connecting the coil section 5A with the chamber 2 which opens by pressure from chemical in 5A. 4 refers to the bottom part of the chamber 2, 5 is a cover or inclosure for the coils 5A. 6 is a part of a Xmas tree. 7 is the upper part of the device in ornamental form with a decorative band 7A. 8 are counter-balancing means connected to the under surface of 5 by means of the connection 9 for the purpose of retaining the device in proper position on 6.

The operation of the device is simple and inexpensive: A liquid chemical, preferably one that expands and develops pressure quickly is contained in the coil section 5A and a fire extinguishing liquid chemical fills the chamber 2 up to the level indicated by 2A, such level being below the sprinkling, or spraying connected ring 1. A valve 3 connects the coil section with the chamber 2, the device is then mounted on the top of a Xmas tree, or other object to be protected, as shown. In the event such tree catches afire, the heat from the fire reaches the coil section 5A and is also deflected onto the coil section by reason of the cover, or hood 5. The heat expands, or volatilizes the chemical in 5A causing pressure sufficient to open the valve 3, and such pressure passing through such valve and acting on the liquid in the chamber 2 causes it to rise above the level 2A and flow out into the perforated ring 1 by means of the connecting tubes 1A, and then is sprinkled, or sprayed downward through the perforations 1B to extinguish the fire. The coil section 5A and the chamber 2 may both contain a fire extinguishing chemical, or only chamber 2 in which case the coil section 5A would contain any desired chemical solution that would serve the purpose, namely, one that would be easily and quickly expanded, or volatilized, by heat.

The device may also be so constructed so as to have both the upper chamber and the coil section combined into one chamber containing a fire

extinguishing liquid chemical which would operate by heat in the same manner as described.

The device may also be constructed in such a form that would resemble a decorative object such as a picture frame, etc.

The invention not only serves as a fire extinguishing device but also as a decorative device for Xmas trees, or other objects on which both a decorative, as well as a fire extinguishing, device is desired.

The device may be constructed of any desired and suitable materials, such as plastic, etc.

While we have shown our invention, or device in a desirable form and structure, we do not wish to be limited to one particular design or structure as adaptations of the device to different requirements may require modifications without departing from the basic features, or the spirit, of the invention.

What we claim is:

1. A decorative fire extinguisher comprising a conical shaped cap having a supporting base of circular form, a plurality of connected coils disposed within said base and adapted for containing a chemical in liquid form, a liquid chamber positioned above said coils and connected with said coils by means of a valve in the base of the liquid chamber, a hollow perforated circular ring positioned horizontally around and connected with the said liquid chamber.

2. A decorative fire extinguisher, comprising the structure set forth in claim 1, the said coils adapted to contain a liquid chemical easily and quickly volatilized by heat, the said valve adapted to open by pressure of the liquid in said coils by reason of heat coming in contact with such coils, and the said volatilized chemical flowing into the said liquid chamber through said valve, the volatilized liquid in the liquid chamber rising by means of pressure to flow into the said circular ring and be sprayed therefrom.

3. A decorative fire extinguisher, comprising the structure set forth in claim 2, the said base adapted to be positioned on the top of a Christmas tree and said base provided with counterbalancing weights attached to the outer edge of the base and depending therefrom.

WILLIAM J. KORTH.
WILLIAM J. KENDER.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,233,289	Thomson	July 10, 1917
1,866,151	Burnham	July 5, 1932