

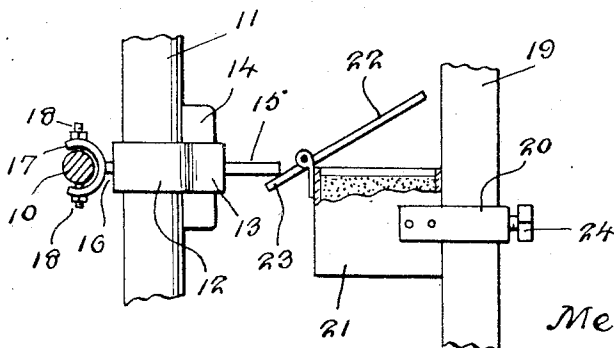
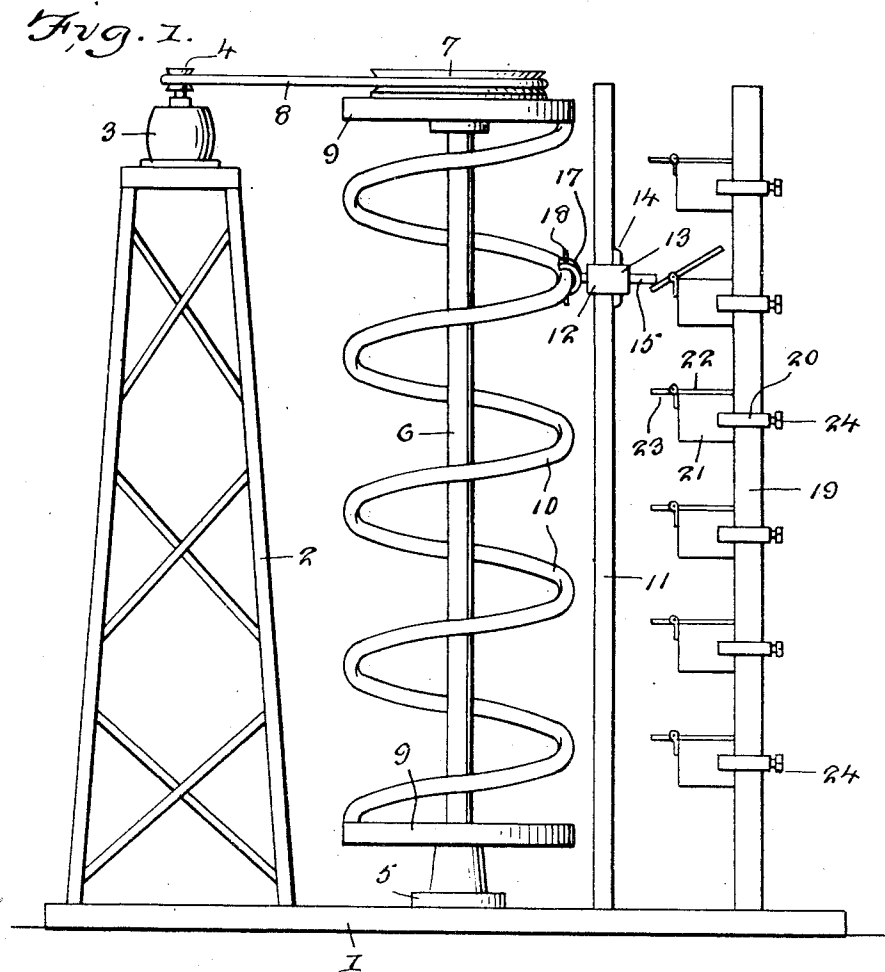
Jan. 17, 1939.

M. W. MERZ

2,144,190

AROMA DIFFUSING APPARATUS

Original Filed Feb. 9, 1937



Melvin W. Merz
INVENTOR
BY Victor J. Evans & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE

2,144,190

AROMA DIFFUSING APPARATUS

Melvin W. Merz, Geneva, Ill.

Application February 9, 1937, Serial No. 124,905

Renewed October 17, 1938

4 Claims. (Cl. 272-9)

This invention relates to an aroma diffusing apparatus and its general object is to provide an apparatus which is primarily designed for use in theatres and the like, such as motion picture theatres, for the purpose of releasing odors, to be spread throughout the theatre by air currents from a fan or cooling system in synchronized relation with a scene being shown and to be appropriate thereto or to correspond therewith, such as for example the odor of a perfume is spread when a ball room scene or scene of a lady appears on the screen, the scent or odor of exploding gun powder during a battle scene, the aroma of cooked foods during a restaurant scene, and etc., with the result it will be obvious that my apparatus tends to make the pictures more realistic, than those at present.

A further object is to provide an aroma releasing and diffusing apparatus that is simple in construction, inexpensive to manufacture, easy to install and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a front view of the apparatus which forms the subject matter of the present invention.

Figure 2 is a fragmentary view illustrating the means for opening the closure of a chemical container, on a larger scale than that shown in Figure 1.

The embodiment of the invention shown, includes a base 1 that has secured to and rising therefrom adjacent one end thereof a supporting means in the form of a derrick 2, the latter having mounted on the top thereof an electric motor 3 which has a grooved pulley 4 secured to its armature shaft for a purpose which will be presently described.

Mounted on the base or platform 1 and preferably centrally thereof in the form as shown, is a bearing 5 which has mounted for rotation therein the lower end of a shaft 6, and the shaft has fixed to its upper end a grooved pulley 7 that is much larger in diameter than the pulley 4, and the pulleys have trained about the same a

belt 8 for rotating the shaft 6 from the motor as will be apparent.

Secured adjacent to the upper and lower ends of the shaft 6 are disk plates 9 and disposed between the plates 9 and having its ends secured thereto is a spiral track 10 which surrounds the shaft in a manner whereby the convolutions thereof are concentric with the axis thereof.

Mounted on and rising from the base 1, in parallelism with the shaft 6, is an upright 11 which acts as a guide for a collar 12, the latter being slidably mounted on the upright for vertical movement and includes parallel ears 13 between which is secured a block 14 disposed in wiping engagement with the upright 11, and the inner face of the block 14 is curved to follow the curvature of the upright. The ears have means bridging the same and extending outwardly from the bridging means is a stud 15 for a purpose which will be later described.

Secured to the collar 12 and extending from the side thereof opposed to the stud 15 is the shank 16 of a substantially semi-circular member 17 that is received by the convolutions of the track, for the latter to act thereon for moving the sliding means that includes the collar, on the upright 11. The semi-circular member is preferably provided with track engaging stud bolts 18 which are adjustable with respect thereto by nuts.

An upright 19 is also provided and is likewise secured and rises from the base 1 in parallelism with the upright 11. Secured to the upright 19 by adjusting members 20 are containers 21 which are provided with hinged closures in the form of lids 22, the lids being hingedly secured to the containers and projecting outwardly from the lids are fingers 23 arranged for disposal in the path of the stud 15, so that upon movement of the sliding member on the upright 11 the stud will contact the fingers and open the lids in a manner as best shown in Figure 2. The adjusting members are preferably U-shaped and threadedly mounted in the bight portions thereof are screw bolts 24 engageable with the upright 19 for adjustably securing the containers at any desired height on the upright.

From the above description and disclosure of the drawing, it will be obvious that in the use of my apparatus the motor 3 which is controlled by any suitable means is put into operation, for rotating the track 10, through the instrumentality of the shaft 6, and such rotation will move the lid opening means vertically upon the upright 11, so that any one or all of the lids of the containers

will be opened when desired, as any one of the containers can be disposed so that the fingers 23 of the lids thereof are out of the path of the stud 15.

5 The containers have suitable chemicals therein preferably in liquid form of high volatile properties, so that when the lid of any one of the containers is opened the odor of the chemical within the open container will escape therefrom.

10 It will be understood from the objects of this invention, that the apparatus which forms the subject matter thereof is arranged whereby the containers are disposed in the path of air currents from an electric fan or the air cooling system of the theatre, so that when the lids of the containers are opened, the odors will be spread throughout the entire area of the theatre, and of course the times of the opening of the lids are synchronized with certain scenes in the picture being shown, for the purpose and in the manner as set forth in the general object of the invention.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

25 It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

35 1. An aroma diffusing apparatus comprising a plurality of containers adapted to receive aroma emitting means, a normally closed cover for each container, means slidably mounted and engageable with the covers for individually opening the same, rotatably mounted spiral means for actuating the cover opening means, and means for rotating the spiral means.

40 2. An aroma diffusing apparatus comprising a plurality of superimposed containers adapted to receive aroma emitting means, a gravity closed

cover for each container, slidably mounted means for opening the covers, means on each cover and arranged in the path of the slidably mounted means so that the covers are individually opened upon movement of the slidably mounted means, 5 rotatably mounted spiral means providing a track, means connecting the slidably mounted means with the track for the latter to move the slidably mounted means, and means for rotating the spiral means.

10 3. An aroma diffusing apparatus comprising a plurality of superimposed containers adapted to receive aroma emitting means, gravity closed covers for each container for confining the aroma of the emitting means therein, an upright, means 15 slidably mounted on the upright, a finger for each cover and arranged in the path of the slidably mounted means for the latter to individually open the covers, a shaft mounted for rotation, a spiral track connected to the shaft to be rotated thereby, 20 means of connection between the slidably mounted means and the track for the latter to move the slidably mounted means on its upright, and means for rotating the shaft for rotating the spiral track accordingly.

25 4. An aroma diffusing apparatus comprising a base, an upright rising from the base, a plurality of containers adjustably mounted on the base and adapted to receive aroma emitting means, a cover for each container and being normally closed by gravity, means mounted for vertical movement and engageable with the covers for individually opening the same, a shaft mounted for rotation on the base, a spiral track surrounding the shaft and having the ends thereof 35 in connection with the shaft to be rotated from the latter, means between the slidably mounted means and track for moving the slidably mounted means vertically upon rotation of the track, motive means supported above the base and having 40 connection with the shaft for rotating the latter.

MELVIN W. MERZ.