June 30, 1953 M. E. BARKER 2,643,928

CONTAINER FOR HOLDING AND DISPERSING INCENDIARY ARTICLES WHICH CONTAIN PHOSPHOROUS

Original Filed April 9, 1941

Fig. 1.

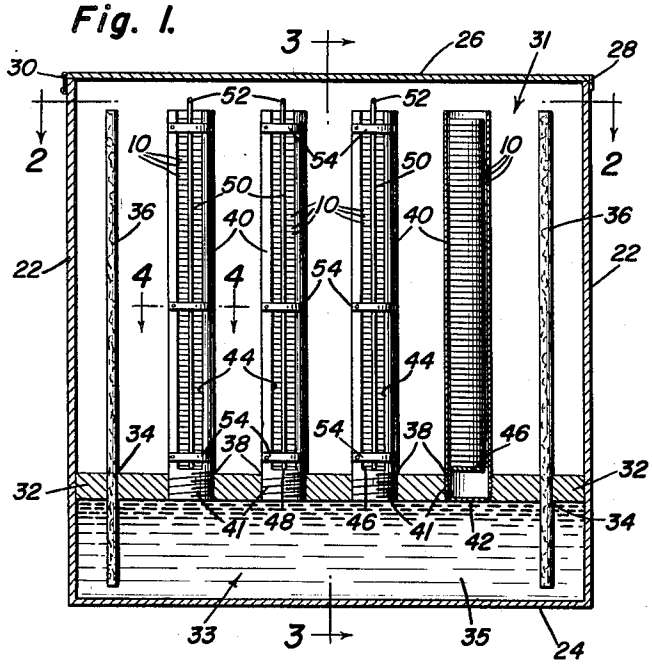


Fig. 2.

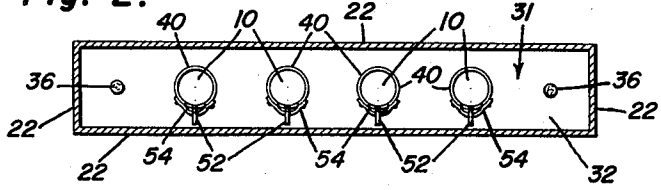


Fig. 3.

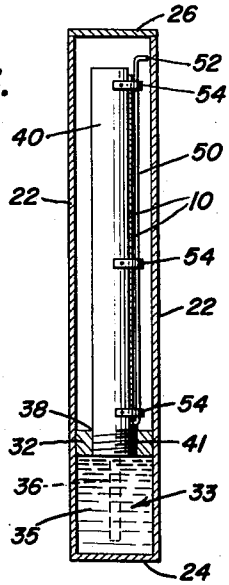


Fig. 4.

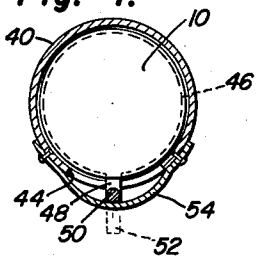


Fig. 5.

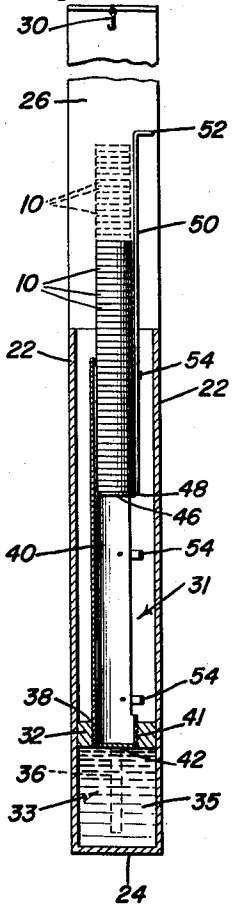
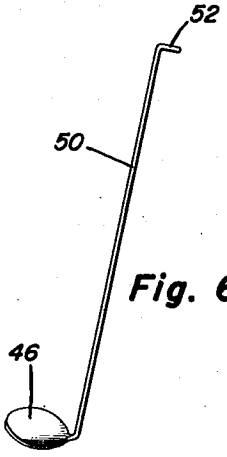


Fig. 6.



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Patented June 30, 1953 2,643,928

UNITED STATES PATENT OFFICE

2,643,928

CONTAINER FOR HOLDING AND DISPERSING INCENDIARY ARTICLES WHICH CONTAIN PHOSPHOROUS

Maurice E. Barker, Washington, D. C.

Original application April 9, 1941, Serial No. 387,553, now Patent No. 2,558,726, dated July 3, 1951. Divided and this application February 1, 1951, Serial No. 211,204

1 Claim. (Cl. 312—31.01)

(Granted under Title 35, U. S. Code (1952), sec. 266)

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The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to the provision of an improved container particularly adapted for holding and dispersing incendiary articles which contain phosphorous, such, as for instance, the incendiary disk disclosed in my original application for Patent Serial Number 387,553 which matured July 3, 1951 into the U. S. Patent No. 2,558,726 entitled "Incendiary Article."

In certain military operations it is necessary to have self-ignitable incendiary articles at hand which are adapted to be dropped from a plane or otherwise distributed where a fire will do the enemy significant damage.

These articles are made in such a manner that they will not ordinarily ignite until some time after their distribution over the target area. Some delay is of course needed in order to protect the disperser of the articles from being promptly discovered and executed by the enemy in this area.

The incendiary articles are preferably carried in suitable containers or dispensers which are adapted and designed to prevent the articles from being ignited either during transportation or just after their dispersal in enemy territory.

The provision of such a container or dispenser is the chief object of this invention.

Its other objects will become apparent from the following specification and claim, and from the drawings filed herewith.

In these drawings Fig. 1 is a partly sectional, partly side elevational view showing a preferred modification of my invention which is loaded with the incendiary articles.

Fig. 2 is a section taken along line 2—2 of Fig. 1,

Fig. 3 is a section taken along line 3—3 of Fig. 1,

Fig. 4 is a section taken along the line 4—4 of Fig. 1,

Fig. 5 is a partly sectional, partly side elevational view showing the dispenser of Fig. 1 with its cover open and the tablets on one of the dispenser stacks lifted by a supporting platform in order that they may be more readily thrown out of the container, and

Fig. 6 is a perspective view showing one of the lifting platforms.

These incendiary articles may be discs 10. They preferably have inner cores of phosphorous (not shown) encased in a nitrated or sheathing (also not shown). It is unnecessary to further describe this disc as all of its details are clearly disclosed in the above-mentioned patent.

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This device is a container comprising walls 22, bottom 24, and a hinged cover 26, said cover being attached by means of hinge 28 to one of the said walls 22 and removably fastened to an opposite wall by a hook-and-eye device 29, or by other convenient device. A false bottom 32 separates the container into a main chamber 31 and a plenum chamber 33 which may be filled with water 35. Its false bottom is provided with apertures 34 through which wicks 36 extend from the water in the plenum chamber to a location near the top of the main chamber, for the purpose of drawing water up from the plenum chamber and passing it off as vapor in the main chamber.

The false bottom 32 is further provided with threaded apertures 38 in which tubes 40 are threadedly engaged with said false bottom. Secured in each tube 40 and near the bottom end thereof is a supporting disk 42 positioned to support a stack of incendiary articles 10. The tube 40 is not a complete cylinder, but is provided with a slot 44 extending longitudinally of the tube for the entire length thereof or for substantially the entire length thereof.

The mechanism for lifting the incendiary articles 10 from the tube 40 when the articles are to be used comprises a lifting platform 46 positioned within the tube 40 and preferably below the lowest disk 10, and adapted for travel within the tube 40. Said lifting platform 46 has a projection 48 extending into the slotted portion 44 of the tube 40. Integral with said projection is a rod extending lengthwise of the tube 40 and bent at the top to form a handle 52. Screw threads by which the tube 40 is secured into the false bottom 32 are indicated in Figure 7 by part number 41.

A preferred method of operating the apparatus will now be described, although the invention is not to be limited thereto. The cover 26 being open, the tubes 40 are initially removed from the false bottom 32, and water is poured into the plenum chamber 33 through the apertures 38. In each of the tubes 40 the lifting platform 46 is positioned at substantially the bottom of the tube to rest on the supporting disk 42. Incendiary articles 10 are then piled above said lifting platform, until the tube 40 is substantially filled with the articles. Each tube so filled is then screwed into the appropriate aperture 38 in the plenum chamber 42. During storage the wicks 36 keep the main chamber 31 saturated with or substantially saturated with water vapor, and thus prevent drying out and disintegration of the coating on the individual incendiary articles and spontaneous combustion of said incendiary articles.

The dispensing operation will now be described. The cover 26 is opened, and the handle 52 is grasped with the fingers of one hand, and slowly lifted, raising the incendiary articles up and out of the tube 40. At the same time each incendiary article is grasped as it rises above the upper end of the tube with the other hand and thrown in the desired direction. In case these are being dispensed from an aeroplane onto targets below, the articles are merely thrown clear of the aeroplane when the aeroplane is in the proper position.

The pellets or disks are of such weight and shape that they will sail and spread broadly over an area, so that many small fires will be started.

It will be understood that variations of this invention will be apparent to those skilled in the art without departing from the spirit of invention nor exceeding the scope of the appended claim.

I claim:

A container for holding and dispensing incendiary articles containing phosphorus and which are stable in relatively moist air but spontaneously ignite in relatively dry air; said container being provided with a movable cover and having a horizontal partition separating said

container into a plenum chamber adapted to serve as a water tank and an air chamber above said plenum chamber, said partition being threaded with a wick element extending both into the water tank and air chamber and being provided with an interiorly threaded recess portion threadly receiving an exteriorly threaded dispensing tube adapted to hold a stack of said articles, said tube being provided with a movable support for said stack to the end that articles in said stack may be raised one at a time, above the upper level of said tube.

MAURICE E. BARKER.

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