Nov. 18, 1969 J. H. POOR ET AL 3,479,101

AUTOMATIC DISPENSER

Filed April 19, 1967 3 Sheets-Sheet 1

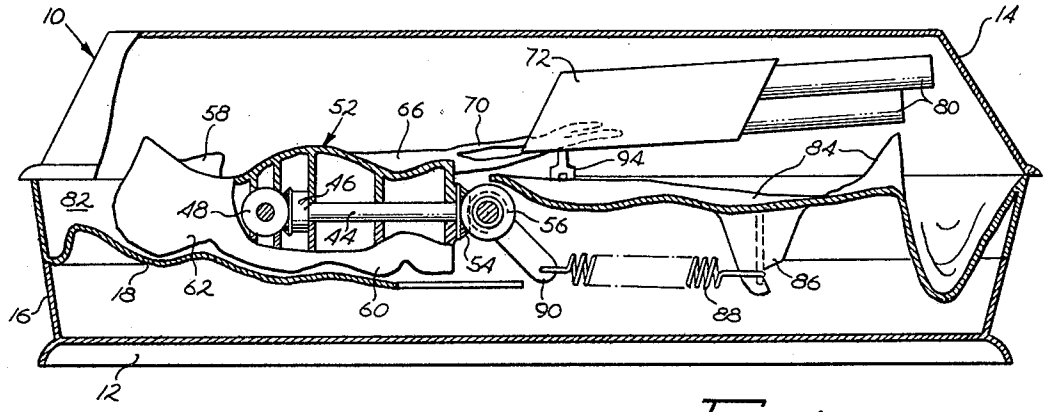


FIG. 1

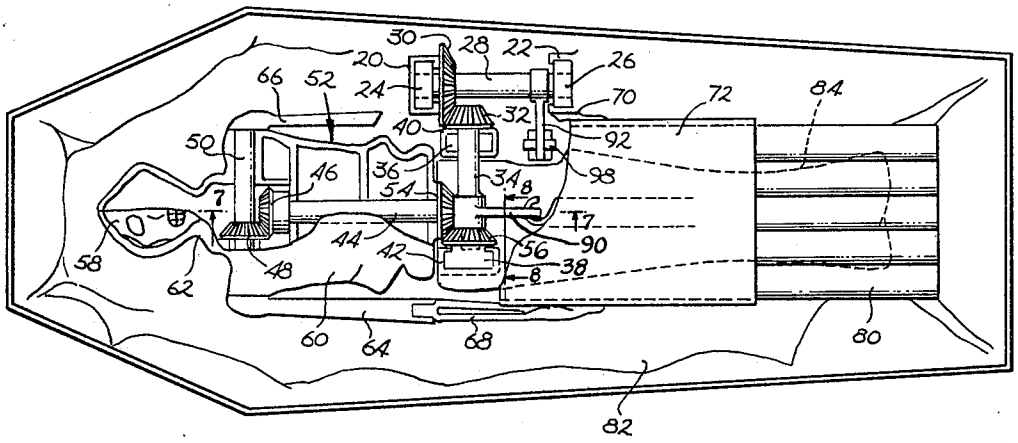


FIG. 2

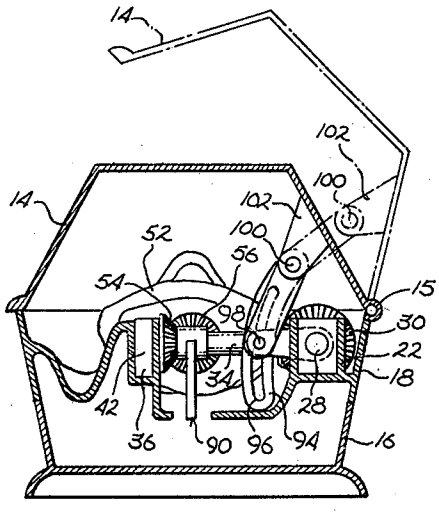


FIG. 3

JOHN H. POOR
CHARLES H. LOGAN
INVENTOR.

BY R. E. Beaugureau
ATTORNEY

Nov. 18, 1969 J. H. POOR ET AL 3,479,101

AUTOMATIC DISPENSER

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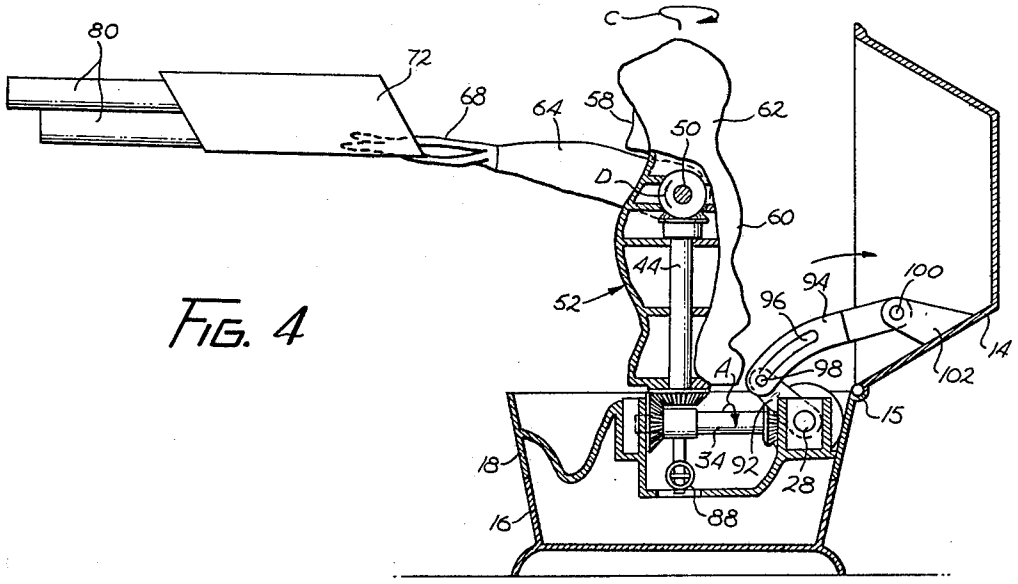


FIG. 4

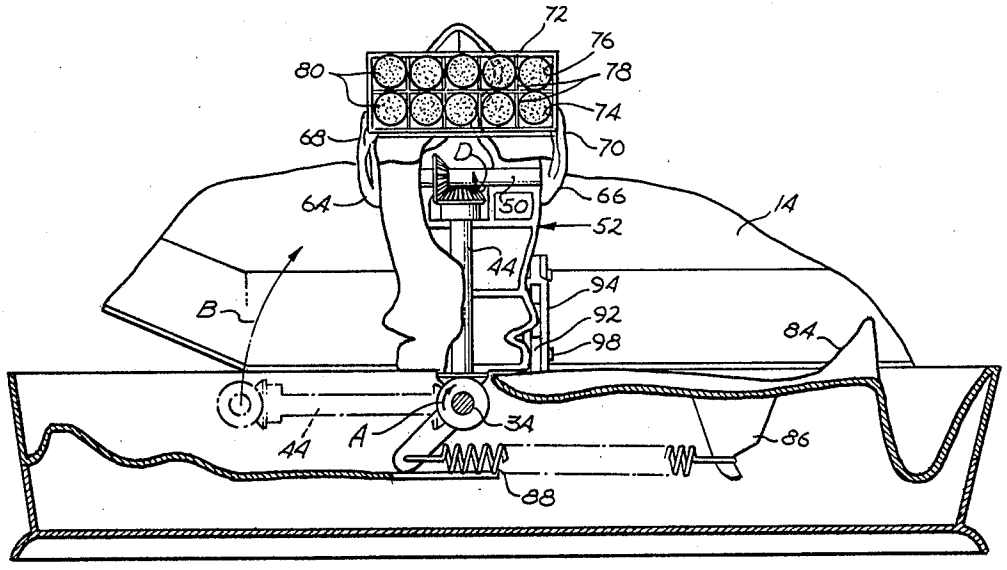


FIG. 5

JOHN H. POOR
CHARLES H. LOGAN
INVENTOR.

BY R. E. Beaupre
ATTORNEY

Nov. 18, 1969 J. H. POOR ET AL 3,479,101

AUTOMATIC DISPENSER

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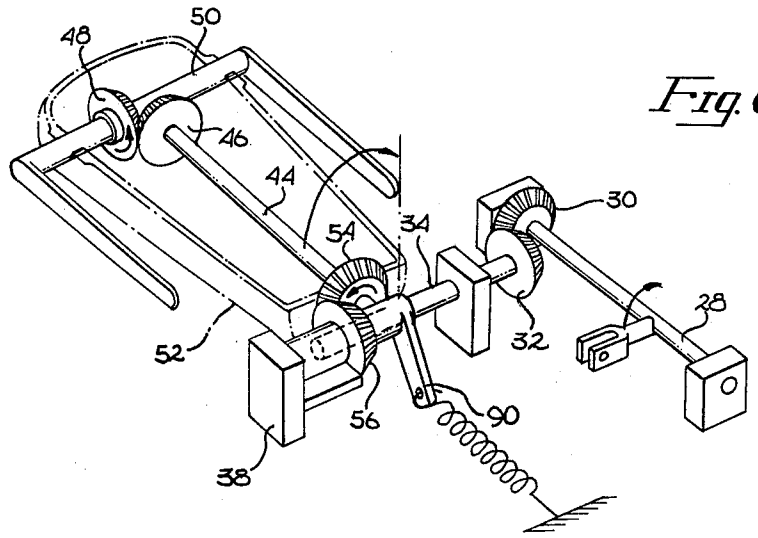


Fig. 6

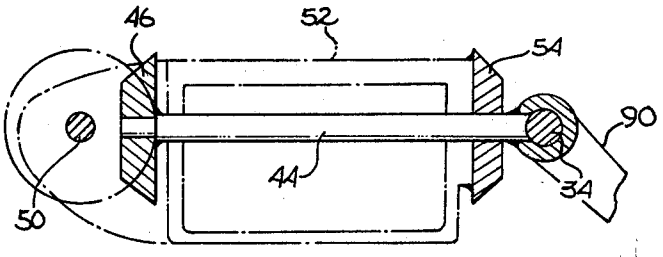


Fig. 7

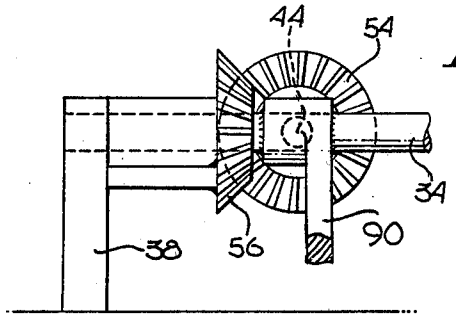


Fig. 8

JOHN H. POOR
CHARLES H. LOGAN
INVENTOR.

BY R. E. Beaugureau
ATTORNEY

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AUTOMATIC DISPENSER

John H. Poor, Northridge, Calif. (32582 Crete Road, Laguna Niguel, Calif. 92677), and Charles H. Logan, 4828 Tilden Ave., Sherman Oaks, Calif. 91403

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U.S. Cl. 312—73 10 Claims

ABSTRACT OF THE DISCLOSURE

An automatic cigarette dispenser in the form of a miniature coffin having a hinged cover which is linked to support means within the coffin which carries a cigarette holder, the support means including a transverse rockshaft supporting a rotatable structure resembling the head and torso or body portion of a recumbent cowled skeleton-like figure and having arms which carry the cigarette holder, gearing operable to rotate the structure with rocking of the rockshaft, and creaking sound-making means operable upon opening of the cover; whereby opening of the cover actuates the sound-making means and rocks the rockshaft for causing the body portion of the cowled skeleton to rise from the recumbent position and turn to present the cigarette holder to the opener of the cover with accompanying weird sound effects.

The present invention relates to an automatic dispensing device and more particularly to a novel cigarette dispenser.

The dispenser of the present invention is constructed with certain novel features to present to the user a holder containing small items such as cigarettes, matches, toothpicks and the like. Preferably, the dispenser is intended for use with cigarettes and will be so described herein.

The cigarette holder is housed within a container or receptacle resembling a miniature coffin and is supported by a structure mounted for combined pivotal and rotational movement, the structure being in the form of a head and torso or body portion of a miniature skeleton-like figure wearing a hooded garment such as a cowl or the like. The mounting means for the structure includes a longitudinally extending shaft or rod on which the structure is rotatably mounted and which is fixed to a transverse rockshaft and pivotable therewith. The cover of the coffin is hinged and is linked to the rockshaft so that the rockshaft is rocked simultaneously with complete opening of the cover for causing the head and body portion of the skeleton-like figure to rise from the recumbent position and turn to proffer or present the cigarettes in the holder to the user of the dispenser. The above-described action of the dispenser is unique and startling to a first-time user of the dispenser or when a cigarette is first proffered in this fashion to a guest. It is often a conversation piece at social gatherings, such as card parties and the like, and serves to initiate informal talk among the guests. Added effect is obtained by means actuated with the opening of the cover for producing creaking noise or weird sounds.

Other features, objects and advantages of this invention will become better appreciated by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIGURE 1 is a front elevational view, partly in section, of the dispenser of the present invention, showing the disposition of the parts with the cover in closed position;

FIGURE 2 is a plan view of the dispenser with the cover removed and parts broken away;

FIGURE 3 is a sectional end view of the dispenser showing the lost-motion linkage;

FIGURE 4 is a sectional end view showing the cover in open position and the article holder in raised and turned position;

FIGURE 5 is a fragmentary front elevational view of the dispenser of FIGURE 4;

FIGURE 6 diagrammatically illustrates certain operating mechanism embodied in the dispenser;

FIGURE 7 is an enlarged section taken on line 7—7 in FIGURE 2; and

FIGURE 8 is an enlarged section taken on line 8—8 in FIGURE 2.

Referring now to the drawings, wherein like reference characters refer to like or corresponding parts, there is shown in FIGURE 1 an embodiment of the present invention designated generally by reference numeral **10** and compirsing a container or receptacle **12**, which preferably takes the form of a miniature coffin, having a cover or lid **14** with a hinge **15**. The container or coffin **12** is formed with a bottom tray section **16** on top of which is secured a support section **18**.

Turning to FIGURES 2 and 3, it will be seen that section **18** is formed with bearing supports or retainers **20** and **22** in which bearings **24** and **26** are supported, the latter journaling a rockshaft **28**. Fixed to shaft **28** is a bevel gear **30** which meshes with a bevel gear **32** secured to a rockshaft **34** which is journaled in bearings **36** and **38** supported in retainers **40** and **42** formed in section **18**, the ratio between gears **30** and **32** being about two-to-one. Fixed to shaft **34**, and rocking or pivoting therewith, is a shaft or rod-like member **44** to the end of which is secured a bevel gear **46** meshing, in about one-to-one ratio, with a bevel gear **48** secured to a rockshaft **50**. Shaft **50** is journaled in a rotatable structure designated generally by reference numeral **52**, the structure being mounted on shaft or rod **44** for rotational movement, such movement being imparted thereto, during pivotal movement of shaft **44**, by means of a bevel gear **54** fixed to the structure and meshing, in about a one-to-one ratio, with a stationary bevel gear **56** fixed to bearing support **42**.

Structure **52** is outwardly formed to resemble or suggest a skeleton-like figure having a head or skull **58** and a torso or body portion **60** wearing a hooded garment **62** such as a cowl or the like. It will be noted that shaft **50** is journaled in that part of structure **52** that is representative of the shoulder portion of the torso or body portion **60** and has fixed to its ends rigid, elongated members made up of elements **64**, **66**, **68** and **70**, elements **64** and **66** being representative of the upper arms of the skeleton-like figure, members **68** and **70** representing the lower arm and hand bones.

Secured to elements **68** and **70**, and movable therewith, is an article container or holder **72** formed with a pair of compartments **74**, **76** (FIGURE 5), each of which is provided with a plurality of ribs **78** and is adapted to hold a plurality of cigarettes or other elongate articles **80**.

Viewing FIGURES 1 and 2, it will be noted that section **18** is fashioned so as to resemble the quilted lining **82** of a coffin and to give the effect of a drape **84** over the lower extremities or legs of the skeleton-like figure, the head and body portion **60** reclining on lining **82** in the recumbent position of the figure. Secured to the underside of drape **84** is a hook or anchor **86** to which one end of a tension spring **88** is attached, the other end of the spring being hooked to an extension or arm **90** rigid with shaft or rod **44**, the spring serving to urge rod **44** and the body portion **60** mounted thereon to the generally horizontal or reclining position.

Turning now to FIGURES 2, 3 and 4, the linkage for rocking rockshaft **28** will be described. Fixed to shaft **28** is a rockarm **92** the free end of which is received between the legs of a forked link **94** formed with slots **96**,

the arm **92** having a pin **98** fixed thereto and extending into the slots **96**, thus providing a lost-motion connection between the arm and the link. The other end of link **94** is connected by a pivot pin **100** to an arm **102** secured to cover **14**.

METHOD OF OPERATION

With the holder **72** loaded with cigarettes or other articles it is desired to dispense and with the parts disposed as shown in FIGURES 1 and 3, the cover or lid **14** is swung upwardly and travels through an arc of about 45 degrees, or to the position shown in phantom in FIGURE 3, without rockshaft **28** being actuated because of the lost-motion connection between rockarm **92** and slotted link **94**. However, continued movement of cover **14** rocks arm **92** and rockshaft **28** clockwise as viewed in FIGURES 3 and 4 which, in turn, rocks shaft **34** by means of gears **30** and **32** in the direction of the arrows A in FIGURES 4 and 5. Rocking of shaft **34** swings rod or shaft **44** in the direction of the arrow B in FIGURE 5 from the position shown in phantom and causes the structure **52**, and the head **58** and torso **60** of the skeleton-like figure which it comprises, to rise from the recumbent position to a substantially vertical position as shown in FIGURES 4 and 5. Simultaneously, spring **88** is stressed, structure **52** is turned in the direction of the arrow C in FIGURE 4 through the action of stationary gear **56** on rotatable gear **54**, and the action of gear **46** on gear **48** during turning of the structure **52** causes shaft **50** to rock in the direction of the arrow D in FIGURES 4 and 5 and raise the arm elements **64**, **66**, **68** and **70** and the holder **72** connected thereto. Thus, the head and body portion of the skeleton-like figure and the holder are given a combined pivotal and rotational movement which proffers or presents the articles in the holder in a dramatic and startling manner.

For added effect, hinge **15** may be fabricated so that relatively movable parts rub and are treated or are made of materials which produce a creaking noise or weird sound as the cover or lid **14** is swung open. If desired, the same effect may be obtained by the use of a suitable ratchet mechanism or a member drawn across treated material or a plurality of reeds and operatively connected to the cover for activation thereby.

Additionally, instead of elements **64** and **66** being rigid with elements **68** and **70** respectively, the respective elements may be pivotally connected in order to give the effect of arms bent at the elbows in the recumbent position of the figure, the holder being suitably connected so as to be properly proffered with raising and turning of the figure.

There has thus been provided a cigarette dispenser which is unique and has appeal in proffering cigarettes in a dramatic and startling maner.

Obviously many modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. In an automatic dispensing device, the combination comprising:

a receptacle having a cover;

support means supporting an article holder within said receptacle for combined pivotal and rotational movement; and

actuatable cover means for causing said combined movement of said holder substantially simultaneously with complete uncovering of said receptacle.

2. The combination according to claim **1** wherein:

said suport means includes a rotatable structure having a longitudinal axis about which said rotational movement of said holder takes place, said longitudinal axis intersecting a transverse axis with respect to which pivotal movement of said structure takes place.

3. The combination according to claim **2** wherein:

said structure includes a movable member supporting said holder for movement relative to said structure.

4. The combination according to claim **3** wherein:

said movable member is rotatably mounted.

5. The combination according to claim **1** wherein:

said suport means includes a member fixed to a rockshaft and rotatably supporting a structure carrying said holder.

6. The combination according to claim **5** wherein:

said structure has a cross shaft journaled therein and suporting said holder for swinging movement; and

means interconnecting said cross shaft and said member for imparting swinging movement to said holder with rotation of said structure.

7. The combination acording to claim **5** wherein:

said structure has gearing in engagement with stationary gearing for rotation of said structure with rocking of said rockshaft.

8. The combination according to claim **7** wherein:

said receptacle resembles a miniature coffin;

said holder is adapted to carry cigarettes;

said structure resembles the head and torso of a miniature cowled skelton-like figure;

said cover is hinged for swinging movement and operates through said actuatable means to rock said rockshaft upon swinging the cover to open position;

whereby swinging said cover to open position serves to raise said head and torso of the skeleton-like figure and turn the same to proffer the cigarettes in the holder.

9. The combination according to claim **8** wherein:

said receptacle carries weird sound-producing means operatively connected to said hinged cover for actuation by swinging of said cover;

whereby proffer of the cigarettes is accompanied by weird sound effects.

10. The combination acording to claim **8** wherein:

said cross shaft is disposed across the shoulder portion of the torso of said skeleton-like figure; and

carrying means connected to the ends of said cross shaft and to said holder, said carrying means resembling the upper extremities of said skeleton-like figure.

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BOBBY R. GAY, Primary Examiner

J. L. KOHNEN, Assistant Examiner

U.S. Cl. X.R.

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