July 24, 1951 E. O. HUTCHESON 2,561,626

SMOKING DEVICE

Filed April 27, 1948

Fig. 1.

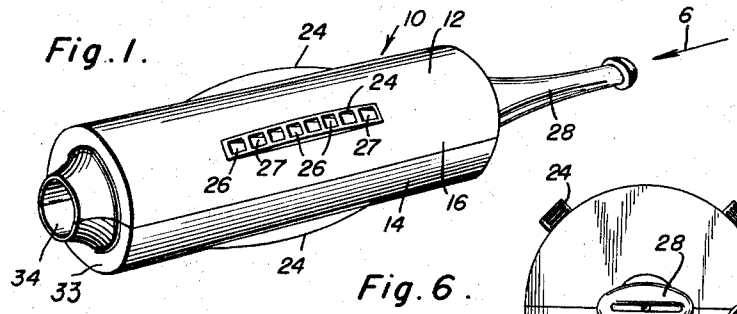


Fig. 6.

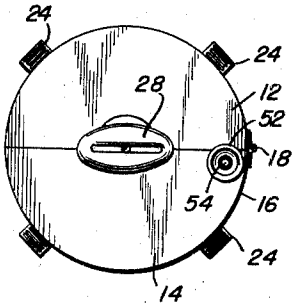


Fig. 2.

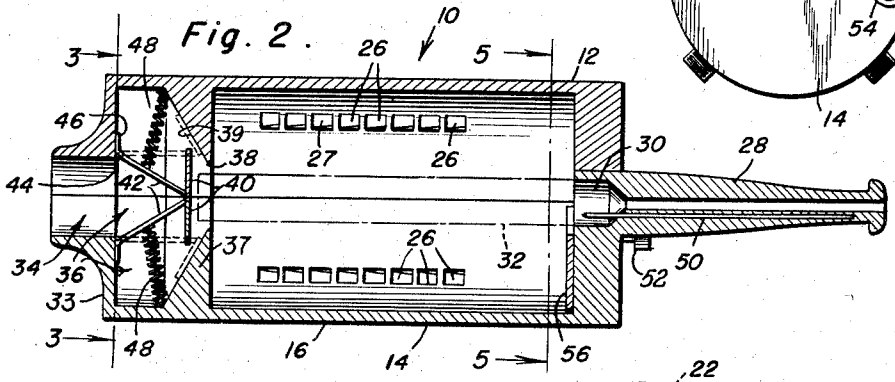


Fig. 3.

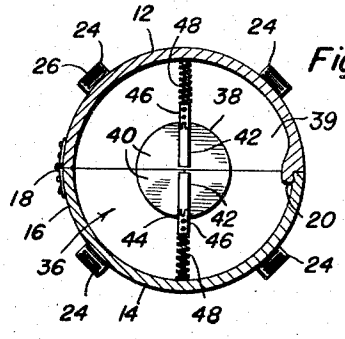
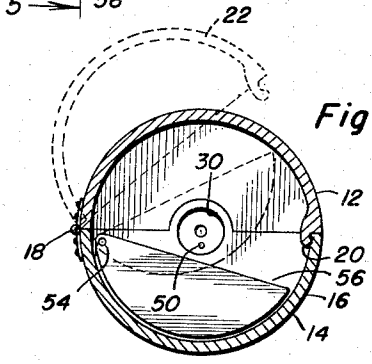


Fig. 5.



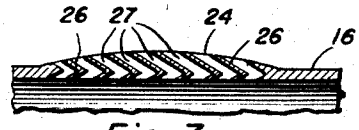


Fig. 7.

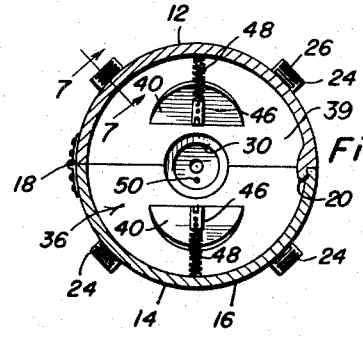


Fig. 4

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SMOKING DEVICE

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1 Claim. (Cl. 131—175)

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This invention relates to new and useful improvements and structural refinements in smoking devices, more specifically, cigarette holders, and the principal object of the invention is to facilitate igniting, smoking and extinguishing a cigarette without light from the cigarette and its igniting means being visible in darkness.

Accordingly, it will be apparent that the invention is particularly adapted for use under "black-out" conditions in war times.

The primary object of the invention is achieved by the provision of a smoking device embodying a casing to receive a cigarette therein, the casing being provided with a normally closed passage whereby a flameless lighter of a conventional type may be applied to the cigarette for ignition purposes, and the casing also including a mouthpiece formed with a socket in which the cigarette may be inserted.

An important feature of the invention lies in the provision of means in the mouthpiece for enabling the smoker to detect a rise of temperature in the socket, when the cigarette is almost consumed and should be extinguished.

A further feature of the invention lies in the provision of externally manipulable means for extinguishing the cigarette in the casing, said means eliminating the necessity of actually opening the casing for the purpose of extinguishing the cigarette.

A still further feature of the invention resides in the provision of a smoking device which is simple in construction, which will readily lend itself to economical manufacture and which may be easily and conveniently manipulated.

With the above more important objects and features in view and such other objects and features that may become apparent as the specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the invention;

Figure 2 is a longitudinal cross sectional view thereof;

Figure 3 is a cross-sectional view taken substantially in the plane of the line 3—3 of Figure 2 and illustrating the igniter passage as being closed;

Figure 4 is a cross-sectional view, similar to that shown in Figure 3, but showing the igniter passage open;

Figure 5 is a cross-sectional view, taken substantially in the plane of the line 5—5 of Figure 2;

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Figure 6 is an end view, taken in the direction of the arrow 6 in Figure 1; and

Figure 7 is a cross-sectional view, taken substantially in the plane of the line 7—7 of Figure 4.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the invention consists of a smoking device designated generally by the reference character 10, the same embodying in its construction a pair of complementary half-sections 12, 14 defining an elongated, substantially cylindrical casing 16, the two half-sections being hingedly connected together at one side as at 18, while their remaining side edges are separably fastened together by an interiorly disposed, longitudinally extending keeper ledge 20.

It should, of course, be understood that the casing 16 may be "opened" by simply separating the half-sections 12, 14 as indicated at 22 in Figure 5, and it is to be noted that the half-sections are provided with elongated, outwardly convexed protuberances 24 formed with sets of angulated fins 26 defining a plurality of reversed air passages 27.

The half-section 14 is formed integrally with a mouthpiece 28 configurated substantially as shown and disposed at one end of the casing 16, the inner end of the mouthpiece being equipped with a socket 30 to receive a cigarette 32 which is receivable in the casing.

The half-sections 12, 14 coact to provide an end wall 33 at the relatively opposite end of the casing 16 and are recessed to form what may be referred to as an igniter passage 34, the same communicating with a relatively enlarged chamber 36 provided with a restricted throat 38 which, in turn, communicates with the interior of the casing.

The chamber 36 is separated from the main body portion of the casing by a transverse partition 37 which has a frusto-conical surface 39 tapering toward the throat 38.

It is to be noted that the cigarette 32, when positioned in the casing, projects somewhat through the throat 38 into the chamber 36, and the passage 34, leading into the interior of the casing, is normally closed by a pair of coacting, semi-circular flaps or doors 40 disposed in the chamber 36.

The flaps or doors 40 are secured to suitable straps 42 which, in turn, are hingedly connected as at 44 to suitable brackets 46 secured in the

chamber **36**, and suitable springs **48**, anchored in the chamber and connected to the straps **42**, are employed for normally urging the flaps or doors **40** to their closed position, as will be clearly apparent.

It will be apparent from the foregoing that when the invention is placed in use, the casing **16** may be opened as has been already described, whereupon a cigarette may be inserted in the socket **30** and the casing closed.

Thereafter, a flameless, chemical lighter of any conventional type may be inserted through the passage **34** into the chamber **36**, and by engaging the straps **42**, the lighter will spread apart the flaps or doors **40**, so that they abut the frusto-conical wall **39** and so that ignition of the cigarette will be facilitated. It is to be noted in this connection that the straps **42** are normally disposed in an inwardly convergent relation (when the doors **40** are closed), so that opening of the doors is facilitated by simply pressing the lighter in engagement with the convergent straps.

In any event, after the cigarette is ignited, the lighter may be withdrawn from the chamber **36** and passage **34**, and the springs **48** will automatically return the doors **40** to their closed position, so as to prevent light rays from the burning cigarette from escaping into darkness.

The air passages **27**, of course, are small and reversed as stated, so that the glow from the cigarette will not be visible.

It may be also added at this point that the restricted throat **38** of the chamber **36** will function as an effective stop, for preventing the lighter or igniter from being inserted too far into the chamber and possibly mutilate the cigarette.

Means are provided for indicating to the smoker that the cigarette is almost consumed, said means assuming the form of a rod **50** possessing good thermal conductivity, this rod being embedded into the mouthpiece **28** and projecting into the cigarette socket **30**, as is shown in Figure 2.

When the cigarette has been almost consumed and is burning in the socket **30**, the resultant rise of temperature in the socket will be conducted by the rod **50** through the mouthpiece **28** and slight overheating of the mouthpiece will indicate to the smoker that the cigarette should be extinguished.

Extinguishing of the cigarette is effected without opening the casing **16**, this being achieved by simply rotating an externally manipulable knob **52** mounted upon a shaft **54** which is rotatably journaled in one end portion of the casing half-section **14** and carries at its inner end a segmental plate **56**.

This plate is normally so disposed that it does not obstruct the socket **30**, but by manipulating the knob **52**, the plate **56** may be brought to a position in which it covers the socket **30** and prevents passage of draft through the socket and mouthpiece. Accordingly, the almost completely consumed cigarette which is still burning in the socket **30** will become extinguished by the absence of draft.

It is believed that the advantages and use of the invention will be clearly apparent from the foregoing disclosure and, accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

In a smoking device, the combination of a substantially cylindrical casing having one end wall provided at the center thereof with an igniter passage, a transverse partition provided in said casing adjacent said end wall and separating the casing into a cigarette receiving chamber and a closure chamber in communication with said passage, a wall of said closure chamber afforded by said partition having a frusto-conical surface convergent toward a central opening formed in the partition for connecting the two chambers, a pair of inwardly convergent straps provided in the closure chamber and hinged at their outer ends to said end wall at diametrically opposite edges of said passage, a pair of coacting semi-circular doors secured to the inner ends of the respective straps and affording a closure for said opening, and resilient means in the closure chamber for urging said doors together, said straps being adapted to be spread apart by the insertion of an igniter therebetween, whereby said doors may be swung away from said opening into abutment with the frusto-conical surface of said partition.

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