June 17, 1947. F. WITT 2,422,277

CIGARETTE LIGHTING CAP

Filed Feb. 24, 1944

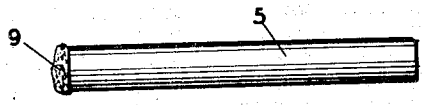


Fig. I

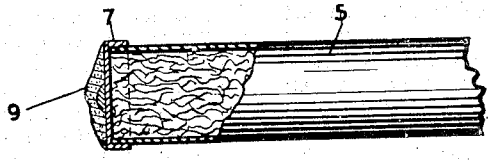


Fig. II.

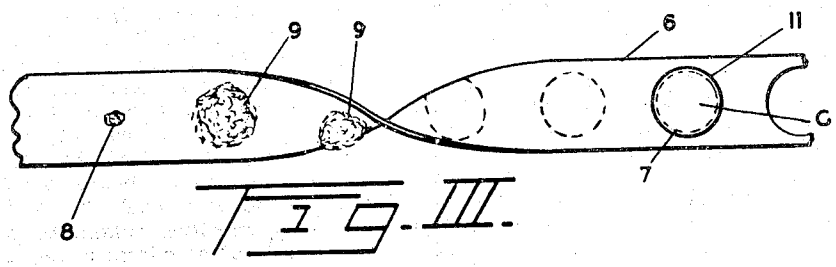


Fig. III.

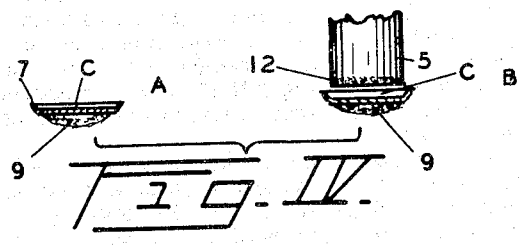


Fig. IV.

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CIGARETTE LIGHTING CAP

Frank Witt, San Francisco, Calif.

Application February 24, 1944, Serial No. 523,696

1 Claim. (Cl. 131—7)

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This invention relates to improvements in cigarettes, and has particular reference to a self-lighting cigarette, which means a cigarette, the end of which can be rubbed upon an abrasive surface, which will cause ignition of the cigarette.

The principal object of this invention is to provide a cap which may be applied to the end of any ordinary cigarette, which cap has incorporated in it an igniting material, and an explosive material, which when rubbed upon a proper surface causes ignition, which sets off the explosive material, which in turn causes the tobacco to become ignited.

A further object is to produce a device of this character which is economical to manufacture and which will not impart to the cigarette any objectionable taste.

A further object is to provide means for applying this cap to a cigarette without materially increasing the cost of the manufacture and sale of the cigarette.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. I is a side elevation of a cigarette having my invention applied thereto.

Fig. II is an enlarged fragmentary portion of a cigarette showing my invention applied thereto and partly in cross section.

Fig. III illustrates the strip of paper having the ignition and explosive material applied thereto.

Fig. IV, diagrams "A" and "B" designate a cross-section of the cap and the application to the cigarette respectively.

Any ordinary cigarette requires the application of a match or other ignition means in order to light the tobacco in the cigarette, and it frequently occurs that such ignition means is not available; therefore, the cigarette cannot be ignited.

Applicant is aware of the fact that means have been applied to cigarettes for the purpose of igniting them; however, these means have been expensive, and at the same time objectionable tastes were injected into the cigarette. Applicant has, therefore, devised a self-lighting cigarette which has none of these disadvantages.

Applicant has devised a paper cap which may be applied economically to the end of a cigarette, and by rubbing the end of the cigarette

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with the cap applied thereto to a proper abrasive surface, ignition will be caused, which ignition will in turn set off what may be termed an explosive charge which will cause the shooting of a flame into the cigarette's core or center of the end, thus igniting it, which action will take place without any appreciable flame, thus making the cigarette one which may be used by troops where the ordinary flame or ignition, as for instance, of a match would prove objectionable.

In the accompanying drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 5 designates an ordinary cigarette, to which is applied my invention.

My invention consists of forming from a strip of paper, 6, a cap designated by the numeral 7. In forming this cap from the strip of paper, 6, I first deposit on the paper an explosive material 8, consisting of a mixture of potassium nitrate 75%, charcoal 15% and sulphur 10%, over which is deposited an ignition material 9. As the strip of paper passes through the machine, it is twisted so as to be in the proper position to be die-cut, cupped and ready to be adhered to the end of the cigarette. The line for the die-cutting is shown at 11.

The cap as a whole will be designated by the letter "C".

In Fig. IV—"A" I have shown the cup "C" in the position it will assume just previous to being applied to the end of the cigarette.

In Fig. IV—"B" I have shown the cigarette as it is about to be applied to the cup, and it will be noted that adhesive material 12 is deposited on the lower end or tip of the cigarette so that as the cup is brought thereagainst, through the medium of a forming die, the cup will be adhered to the end of the cigarette.

It will thus be seen that I have devised a very simple means for igniting a cigarette and applying the igniting material to the end of the cigarette and in such a way that the ignition material will not impart to the tobacco any objectional qualities, and at the same time the cap on the end of the cigarette will seal the end of the cigarette and further prevent the drying out of the tobacco in the cigarette.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of

the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:

The combination with a cigarette, of a cap secured to one end of said cigarette, means for adhering said cap to the walls of said cigarette adjacent said one end thereof, an explosive material mounted on said cap and centrally positioned with respect to the axis of the cigarette and an igniting material overlying and enclosing said explosive material whereby when said igniting material is ignited said explosive material will burn through said cap and ignite the center portion of said cigarette.

FRANK WITT.

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