

## PATENT SPECIFICATION



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533.120

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### PROVISIONAL SPECIFICATION

#### Improved Apparatus for making Cigarettes

I, SYDNEY WALLACE PAINTER, a British subject, of 2a, Transmere Road, Petts Wood, Orpington, Kent, do hereby declare the nature of this invention to be as follows:—

This invention relates to an apparatus for making cigarettes of the type adapted to be operated by hand and including an apron in which tobacco is placed, the apparatus being then manipulated so that the tobacco is rolled in the apron and the paper is inserted, the rolling action wrapping the paper around the cylindrically constrained tobacco.

The primary object of this invention is to provide an apparatus of compact construction suitable for carrying on the person containing made cigarettes and which will serve also to contain a quantity of tobacco, cigarette papers and if desired filter tips. A further object is to provide an apparatus in which the rolling of a cigarette can be accomplished quickly and simply and one in which the rolled cigarette is discharged automatically upon the completion of the rolling operation.

Broadly according to this present invention the apparatus comprises a box-like container including a base or container portion and a lid portion, the two said portions being hingedly connected, track or guiding members within the lid member, a roller extending between and co-operating with said track or guiding members, and connected by a link at each end to the base, and an apron within the lid, said apron extending from the end of the roller to a point intermediate the length of the lid. When the box is open, the lid resides at substantially a right angle to the base, with the roller at the bottom of the guides. The apron is of such a length that it can be pressed down to form a pocket for the reception of tobacco.

In operation, a paper is placed on the apron, after the tobacco has been laid in the usual manner in the pocket aforesaid and the lid is closed.

The roller travels upwardly, rolling tobacco and paper. The lid is gapped or otherwise formed adjacent the upper end of the apron, so that when the box is

closed, the made cigarette is discharged through the gap. 55

In a preferred embodiment, the box is of general rectangular form, and may be curved to fit the pocket conveniently. The base portion is dimensioned so as to contain therein a requisite amount of tobacco, and at the front end a transverse hinged platform is provided to form therebeneath a compartment for filter tips whilst the said platform itself serves to support and retain the usual packet containing cigarette papers. 60 65

The lid portion is hinged to the rear end of the base and said lid portion is provided with a top which consists of a lift-up flap. A division or false base is provided in said lid, forming a shallow compartment in combination with the flap, and a recessed under portion to receive the guides and apron. A transverse discharge opening is provided in said division intermediate of its length, serving as a passageway from the recessed under portion to the shallow compartment, which may serve to contain made cigarettes. 70 75

Within said recessed under portion and at each side thereof a guide is provided, each said guide consisting of a metal or like strip having a slot therein. The strips are disposed parallel to the sides of the compartment and each slot is curved, said curving extending inwardly from the hinged end of the lid, then straight, and finally inwardly to the division. Extending between and running at each end within the slots is a roller device, each end of said roller also being mounted on a link, the other end of which is pivotally mounted within and to a side of the base. 80 85 90

The apron which extends between the guides, is secured at one end to the division and adjacent the hinge and at the other end to the division immediately below the opening. The guides extend to immediately above said opening. 95

In using the apparatus, the box is opened so that the lid resides substantially at a right angle with respect to the base. The apron is then pressed down so that a pocket or V-shaped portion is formed below the roller, and a quantity of tobacco is placed in the said pocket, with a filter 100 105

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tip at one end if required. A paper is then placed against the apron, so that its one edge is adjacent the tobacco, whilst its other edge, with the moistened gummed portion away from the apron, is just beneath the opening.

The lid is then slowly closed, and consequently the tobacco is rolled, the links forcing the roller up the guides, the curving inwardly of said guides in combination with the curved division compressing the tobacco the required amount and preventing the apron from slipping. Just prior to the complete closing of the lid, the cigarette is completely rolled and owing to the inward curving of the ends

of the guides, the rolled cigarette will be expelled into the shallow compartment through the opening.

Upon raising the flap, the rolled cigarette is exposed. The said compartment may be utilised as a case for the made cigarette.

Dated this 9th day of October, 1939.  
KINGS PATENT AGENCY LIMITED.

By B. T. KING, A.I.Mech.E.,

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Agents for the Applicant.

## COMPLETE SPECIFICATION

### Improved Apparatus for making Cigarettes

I, SYDNEY WALLACE PAINTER, a British subject, of 2a, Transmere Road, Petts Wood, Orpington, Kent, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to an apparatus, operated by hand, for making cigarettes, of the type comprising a case having a lid portion and container portion which are hingedly connected, the said lid having a cigarette rolling ribbon fixed thereto and a rod-like member which on the closing of the lid is guided by guiding members on the lid to form a pocket in the ribbon and so roll and form the cigarette. In apparatus of this type, the made cigarette is discharged through a slot in the top of the lid, upon the closing of the box.

The primary object of this invention is to provide an apparatus of compact construction suitable for carrying on the person which will also serve to carry tobacco and papers and which further will serve as a cigarette case and hold the made cigarettes. A further object is to provide an apparatus wherein the tobacco is compressed to produce a firm cigarette with firm clean ends.

According to this invention there is provided a cigarette making apparatus of the type set forth which is characterised in that the lid portion is provided with a false base or division, the said division having the cigarette discharge slot therein, and that the top consists of or includes a lift-up flap, whereby the compartment between the division and flap forms a container for made cigarettes.

In order that a clear understanding of the invention may be obtained reference

will now be made to the accompanying sheet of drawings which illustrate a preferred embodiment of the invention and wherein:

Figure 1 is a sectional side view of a machine constructed in accordance with the invention, and

Figure 2 is an elevation taken on the line 2—2, Figure 1 and looking in the direction of the arrows.

The box which is of general rectangular form comprises a container portion 1 to which is hinged by means of a pin hinge 2 the lid 3. The said portion 1 is dimensioned so as to serve as a container for tobacco and may have a compartment to receive therein filter tips. The packet of cigarette papers may also be retained in or by the container but preferably and as shown said packet 4 is retained on the lid portion 3 by means of clips 5.

The lid portion 3 is formed with a division wall or false bottom 6 on the inner surface of which the guide plates 7 are mounted one at each side. Each said guide plate 7 has a slot 8 therein the said slots being curved as shown. Extending between and running at each end within the slots is a roller device 9, each end of said roller also being mounted on a link 10, the other ends of said links being each pivotally mounted on a lug 11 within the container. The division wall 6 is provided with a transverse slot 12 therein and the one end of the apron or ribbon 13 is mounted adjacent the slot, whilst the other end is mounted in the lid adjacent the pivot, the said apron passing round the roller 9 and being of such a length that the necessary pocket can be made therein.

The lid portion 3 is constructed so as to serve as a container for made cigarettes.

The end 6a of the false bottom 6 curves in a direction towards the top of the lid, which is formed so that a flap or closure 14 can be hinged thereto by means of a hinge 15. This arrangement, in combination with the false bottom 6 and the general forming of the lid, results in the formation of a compartment 16 to which access is obtained from the container by the slot 12, and from the outside by the flap 14.

The cigarettes are made in the manner later described and are discharged into the compartment 16. In order that the compartment can be filled completely suitable means are provided whereby the cigarettes firstly fill the portion of the compartment to one side of the slot and then the portion to the other side. For example, two trigger members 17, 17a are provided which are interconnected by means not shown so that the one, say the trigger 17, is held in position to enable the cigarettes to pass into the other portion of the compartment. When the cigarette holds the trigger 17a upwardly the trigger 17 is released so that the remainder of the cigarettes fill the compartment completely.

In operating the machine the box is opened and the apron pressed down as shown so that the pocket is formed for the reception of the tobacco. A paper is placed against the apron with its one edge adjacent the tobacco and with the moistened gummed edge facing away from the apron and just beneath the slot 12.

The box is then slowly closed and consequently the tobacco is rolled the links 10 forming the roller up the guides. It will be observed that the guides and division during the first part of travel are curved so as to converge thus compressing the tobacco and preventing the apron from slipping.

This curving results in the formation of a firmly made cigarette. Just prior to the complete closing of the lid the cigarette is completely rolled and owing to the inward curving of the ends of the guides the rolled cigarette is expelled into the compartment 16 through the opening 12. This operation can be repeated until the desired number up to the maximum have been made and discharged into the compartment 16.

The compartment will then serve as a case for the made cigarettes, the box therefore housing all the necessary accessories for the making of the cigarettes, together with a number of made cigarettes. Instead of the cigarettes being discharged into the compartment, the false bottom 6 may be formed with a number of transverse ribs which divide the said compartment into channels each of which can

receive a cigarette. In this example the flap must be raised after the making of the cigarette, and the cigarette placed in one of the channels.

The box may be of general rectangular form or it may be given any desired curvature to fit the pocket.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A cigarette making apparatus of the type set forth, characterised in that the lid portion is provided with a false base or division, the said division having the cigarette discharge slot therein, and that the top consists of or includes a lift-up flap whereby the compartment between the division and flap forms a container or case for made cigarettes.

2. A cigarette making apparatus according to Claim 1, characterised in that means are provided within the compartment for guiding the cigarettes as discharged first to one side of the slot and then to the other.

3. A cigarette making machine as claimed in Claim 1, characterised in that the division is curved and slopes away from the guides at the end adjacent the hinges the curving enabling the pocket to be formed in the apron.

4. A cigarette making machine as claimed in any of the preceding claims characterised in that the guides slope with respect to the division for a distance adjacent the hinge such that the roller approaches the division during the first part of the rolling operation, thus ensuring that a firm cigarette with firm clean ends is obtained.

5. A cigarette making machine comprising a case having a lid portion and container portion which portions are hingedly connected, the said lid portion having a bottom wall or division with a transverse slot therein with the lid formed to provide a shallow compartment above the division and having a flap or like closure for the said compartment, a rolling ribbon secured on the inner surface of the division at its one end adjacent the slot and at its other end adjacent the hinge, a rod mounted transversely in guide slots in side members carried by the lid, the said mounting being by means of links which are attached to the lid and the roller ends, the closing of the box forcing the roller upwardly to roll the tobacco and paper into a cigarette which is discharged through the slot into the compartment upon the complete closing of the box.

6. A cigarette making machine as claimed in claim 1, characterised in that

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the false base is formed with a number of transverse ribs which divide the compartment into channels each of which can receive a cigarette.

- 5 7. An apparatus for making cigarettes substantially as herein described with reference to the accompanying drawings.

Dated this 10th day of October, 1940.  
KINGS PATENT AGENCY LIMITED,

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[This Drawing is a reproduction of the Original on a reduced scale.]

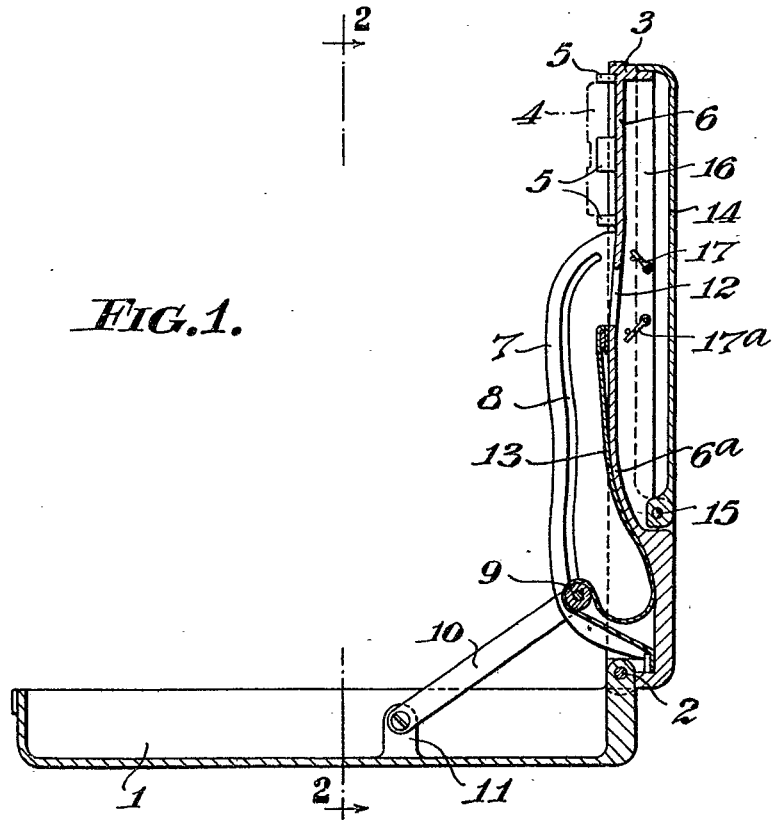


FIG. 1.

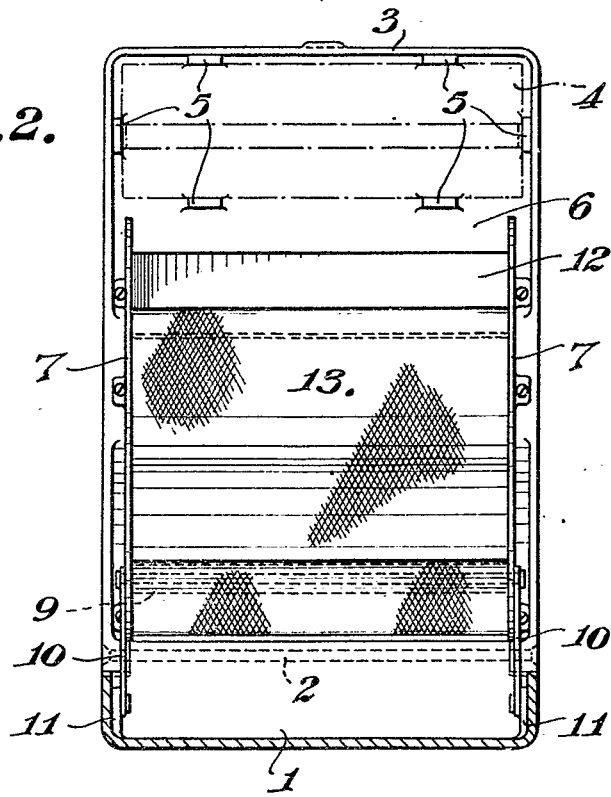


FIG. 2.