

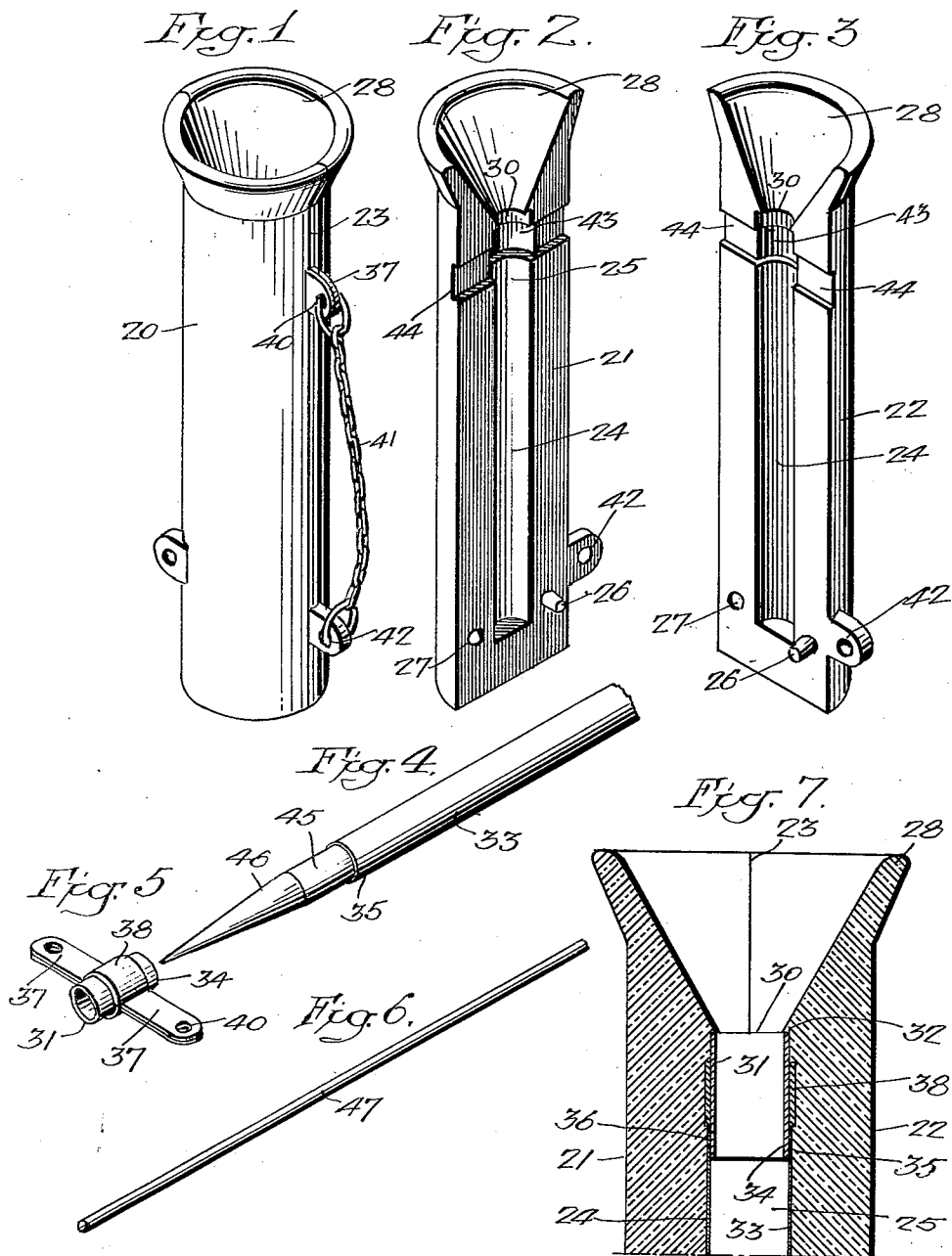
April 29, 1952

G. W. DU LANEY

2,594,747

CIGARETTE MAKER

Filed Dec. 29, 1948



INVENTOR
George W. DuLaney
BY *W. C. ...*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,594,747

CIGARETTE MAKER

George W. Du Laney, Camden, N. J.

Application December 29, 1948, Serial No. 67,963

2 Claims. (Cl. 131-70)

1

The present application relates to cigarette makers.

A purpose of the invention is to facilitate and simplify the process of making cigarettes individually by hand.

A further purpose is to aid an individual user in introducing tobacco into a tube of cigarette paper to make a cigarette.

A further purpose is to clamp the mouth of a tube of cigarette paper firmly between a nozzle and a mold, and to introduce tobacco into the tube through the nozzle.

A further purpose is to facilitate the attachment of a tube of cigarette paper on a nozzle for clamping in a mold.

Further purposes appear in the specification and in the claims.

In the drawings I have chosen to illustrate one only of the numerous embodiments in which my invention may appear, choosing the form shown from the standpoints of convenience in illustration, satisfactory operation and clear demonstration of the principles involved.

Figure 1 is a perspective of the completely assembled cigarette maker of the invention, omitting the tamper.

Figures 2 and 3 are respectively perspectives of the individual mold parts.

Figure 4 is a fragmentary perspective of the guide rod in position within a tube of cigarette paper for attachment of the tube to the nozzle.

Figure 5 is a perspective of the nozzle in position for attachment to the tube of cigarette paper.

Figure 6 is a perspective of the tamper.

Figure 7 is an enlarged fragmentary longitudinal section of the mold and nozzle transverse to the lugs, showing the clamping of the cigarette paper in the mold.

In the drawings like numerals refer to like parts.

Describing in illustration but not in limitation and referring to the drawings:

Many smokers are not satisfied with prefabricated cigarettes, either because of the high cost as compared with the cost of tobacco, or because of fastidious taste which makes the smoker unwilling to accept the particular brand or combination of tobacco supplied in the machine-made cigarette, the particular grade of cigarette paper used, or the manner of loading which is characteristic of machine-made cigarettes. There is, therefore, a need for a hand cigarette maker which will permit the individual smoker to make his own cigarettes. It is also desirable to accomplish this in a sanitary and convenient manner, avoiding altogether the complicated technique and the unsanitary features connected with hand rolling of cigarettes.

The present invention is designed to simplify

2

and cheapen the procedure for making cigarettes individually by hand, allowing the user to use tobacco of his own selection or blend, and placing the matter on a high plane from the standpoint of sanitation.

In accordance with the invention a mold and funnel are provided which support a tube of cigarette paper in a position in which tobacco can readily be inserted.

The mouth of the tube of cigarette paper is clamped so that the danger of distorting the end of the tube of cigarette paper or incompletely filling the cigarette with tobacco is largely eliminated.

It will be understood that the user may employ any type of cigarette paper according to his preference, may use any tobacco which he desires and may tamp to any density, or may vary the density from end to end or center to circumference of the cigarette according to any procedure which he prefers.

The mold 20 in accordance with the invention is formed of opposite halves 21 and 22 separated longitudinally from end to end along a parting line 23. When the parts are together they form a tubular mold cavity 24 having an inlet end 25 and a closed bottom wall. In order to register the two halves of the mold cavity, the mold halves are provided with cooperating pins 26 and sockets 27 preferably located near the bottom and capable of interlocking. At the top of the mold and preferably integral therewith (formed from the two halves) is a funnel 28 having a bottom discharge opening 30 from the funnel.

Located at the inlet to the mold cavity and beyond the discharge opening 30 from the funnel is a tubular nozzle 31 which normally is positioned between the discharge opening of the funnel and the inlet to the mold cavity.

As best seen in Figure 7 the interior of the nozzle is desirably slightly larger than the discharge opening of the funnel so that the nozzle fits under a shoulder 32 at the bottom of the funnel. On the other hand the exterior of the nozzle is slightly smaller than the interior of the tube of cigarette paper 33, so that the nozzle at the end 34 remote from the funnel extends into the mouth 35 of the tube of cigarette paper. The nozzle exterior diameter at 34 is desirably close enough to the interior diameter of the tube 33 of cigarette paper, and close enough to the diameter of the mold cavity 24 so that the portion 36 of the mold cavity around the mouth 35 of the tube of cigarette paper clamps the cigarette paper around the nozzle, assuring that as tobacco is forced from the funnel into the tube of cigarette paper, the cigarette paper will not become collapsed, displaced or torn. This clamping action is aided and made possible by the fact that the portions of the mold are separable and

3

can be moved radially inwardly by the hand around the tube of cigarette paper and the nozzle.

In order to assure accurate positioning of the nozzle or ferrule between the funnel and the mold cavity as shown in Figure 7, the nozzle is provided with opposite radial lugs 37, suitably secured to the body of the nozzle by a band 38. One of the lugs has an opening 40 at the end which engages a chain 41 secured at the opposite end to a lug 42 on one of the mold portions. Lugs are desirably provided on both mold portions for the sake of uniformity.

Each mold portion adjoining the inlet 25 of the mold and desirably between the discharge opening 30 of the funnel and the inlet has a cylindrical recess 43 to receive the band 38 and radial recesses 44 to receive the lugs 37.

In order to thread the tube of cigarette paper around the nozzle, a guide rod 45 is provided having a suitably conical end 46. The conical end is small enough to pass into the nozzle, while the diameter of the remainder of the guide rod is desirably approximately the exterior diameter of the nozzle, so that the guide rod will fit into the tube of cigarette paper and, when the conical end 46 is inserted as far as possible into the nozzle, the guide rod will be self-centered and will readily guide the cigarette paper tube as it slipped along the guide rod and on to the nozzle. Once the guide rod has served to aid in threading the tube of cigarette paper on the nozzle, the guide rod is desirably removed before the tube of cigarette paper is inserted in the mold. The tamping down of the tobacco in the interior of the tube of cigarette paper is aided by a tamper 47 which is desirably much smaller in diameter than the interior diameter of the tube of cigarette paper, so that various portions of the circumferential cross section of the cigarette can be tamped to varying degrees of compression as desired.

The extent in which the cigarette paper surrounds and is clamped against the nozzle will vary with individual preference, but it has been found in many cases that this clamping portion may desirably be of the order of $\frac{1}{8}$ " or $\frac{1}{4}$ " long.

In operation the parts of the mold and funnel are first separated and the ferrule or nozzle removed from the mold. The guide rod with the cone end forward is then threaded through a tube of cigarette paper, and the cone end is carried as far as possible into the nozzle, which is aligned with the guide rod as shown in Figures 4 and 5. The tube of cigarette paper is then slipped along the guide rod until the cigarette paper surrounds the nozzle. Then holding the tube of cigarette paper against the nozzle with the hand, the guide rod is removed from the nozzle and tube of cigarette paper. Retaining the nozzle extending inside the tube of cigarette paper, the nozzle and tube of cigarette paper are inserted in the mold, the lugs of the nozzle seating in the slots 44. The tube of cigarette paper extends down and desirably fills the mold to approximately the bottom. The two halves of the mold are then brought together, serving to clamp the tube of cigarette paper at the mouth between the mold halves and the nozzle. The mold parts are held together by the hand or by a rubberband, not shown. Tobacco is then inserted into the funnel, the mold being held upright, and is forced into the cigarette with the aid of the tamper. When the cigarette has been completely

4

filled, any excess of tobacco in the funnel is returned to the pouch or can, after which the mold parts are separated and the nozzle is withdrawn from the inlet end to the cigarette. The cigarette is now removed from the mold and is ready for use or storage.

Where it is desired to employ several blends of tobacco in the cigarette, small increments of tobacco can successfully be introduced into the funnel and tamped down into the cigarette. By this procedure various zones can be made from different types of tobacco.

It will be evident that the mold can be made in different lengths, to satisfy the preference of the user for standard length, or for cork tip or other variations in the wrapping or size. Likewise it will be evident that the mold can be made in any desired cross section other than a round cross section in accordance with the individual preference. The user may likewise introduce any suitable extraneous material, such as a filter, into either end of the cigarette, by simply placing the same in the funnel and tamping it to the proper point in the cigarette.

In view of my invention and disclosure variations and modifications to meet individual whim or particular need will doubtless become evident to others skilled in the art, to obtain all or part of the benefits of my invention without copying the process and structure shown, and I, therefore, claim all such insofar as they fall within the reasonable spirit and scope of my claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a cigarette maker, a mold having separable parts which cooperate, having a tubular mold cavity which is open at the separation of said parts and which is adapted to receive a tube of cigarette paper, having an inlet opening to the mold cavity at one end and having lug slots along the line of separation of the parts at the inlet opening, and a nozzle located in the mold at the inlet opening and having lugs in the lug slots and adapted to clamp a tube of cigarette paper between the nozzle on the inside and the mold on the outside.

2. In a cigarette maker, a combined funnel and mold longitudinally separated into cooperating parts, said mold having a tubular mold cavity and said funnel at one end having a discharge opening connecting with said tubular mold cavity in the interior of the mold, the mold parts having lug slots adjoining the discharge opening of the funnel, and a nozzle in the mold cavity at the discharge opening of the funnel and having lugs which extend into the lug slots, the nozzle and the parts of the mold cooperating to clamp a tube of cigarette paper between the nozzle and the mold cavity.

GEORGE W. DU LANEY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
131,177	Ochs	Sept. 10, 1872
240,336	Pratt	Apr. 19, 1881
1,296,548	Mondor	Mar. 4, 1919
2,005,661	Muller	June 18, 1935
2,182,698	Kirkwood	Dec. 5, 1939