PATENT SPECIFICATION

(11) 1 238 406

1238406

DRAWINGS ATTACHED

(21) Application No. 32295/69 (22) Filed 26 June 1969

(31) Convention Application No. 55849 (32) Filed 1 July 1968 in

(33) Japan (JA)

(45) Complete Specification published 7 July 1971

(51) International Classification A 24 f 13/02

(52) Index at acceptance A2M 1C 3N

(54) HOLDER FOR A CIGARETTE OR TOBACCO PIPE

(71) I, YOSHINORI NISHIDA, of Japanese Nationality of 26 Hashimoto Okuno-cho, Yawata-cho, Tsuzuki-gun, Kyoto-fu, Japan. do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a holder for a cigarette or a tobacco pipe.

The holder may form what is commonly referred to as a cigarette holder wherein a cigarette is inserted into an aperture at the end of the holder, alternatively the holder may be incorporated in tobacco pipe where a tobacco bowl is fitted to the end of the holder, the holder thus forming what is commonly referred to as the stem of the pipe.

As well known, in a conventional holder, because of the structural feature where the inlet of the mouth-piece of the holder is located at the rear end of the smoke duct the smoke inhaled passes through the mouth and advances straight to the interior of the throat, such as he throat at the bronchus, which is in alignment with the inlet.

Since particularly the mouthpiece of the holder is more narrow than the burning portion at the tip of the cigarette or pipe the smoke inhaled in very dense and flows at relatively high speed in the mouthpiece. Further, people who use holders are in the habit of unintentionally holding them in the same position and accordingly users are in the danger of suffering from troubles such as roughness and inflamation in the delicate membranes of the throat, which troubles may in turn give rise to cancerous growths. This fact is applicable to such a type of holder which is provided therein with a nicotine tar reducing means such as a filter. With a cigarette directly held between the lips, when smoke passes through the teeth, it spreads over all the mouth and therefore the smoker inhales mild smoke, with the result that he is less subjected to stimulation of the specific region of the mouth and the throat.

Furthermore, it has often been mentioned as another disadvantage inherent in conventional holders that the nicotine tar effused and left stuck to the inner wall of the holder is hard to remove without the aid of a slender linear body or a solvent and the task of removing the tar is by itself particularly troublesome. Recently there have been sold in increasing numbers holders of various types which are designed to cause the nicotine tar to effuse and remain in large quantities in the holders thereby removing the harmful effects of tobacco. But these holders are all of a construction in which the action of the holder makes it necessary to leave such a large quantity of tar in the duct that operation for removal of the tar not only becomes all the more troublesome but the tar stuck to the inner wall of the smoke duct is difficult to remove completely. Holders of the types described are designed to be divided in a direction at right angles to the longitudinal direction of the holder axis, but as the holder parts thus divided are cylindrical in shape and are each provided with a small hole or bore from which to remove the tar, even if the holders are thus adapted to be divided into parts, they do not release smokers from the troublesome work of cleaning, but on the contrary even a small amount of tar that may possibly be left unremoved because of incomplete cleaning gives a tar odour to smoking and spoils the flavor of tobacco.

A primary object of this invention is to obviate or mitigate the above-described disadvantages. According to the present invention there is provided a holder for a cigarette or tobacco pipe comprising superposed upper and lower halves and a hinge for connecting said halves at one end thereof, said halves forming longitudinally on the insides thereof a smoke duct extending from the fore end of the holder remote from said hinge to the hinge, said hinge having on the inside thereof a pair of lateral

passageways extending from the sides of the holder and meeting at the longitudinal axis of the holder at right angles thereto said passageways communicating with said smoke duct, said halves having coupling means to keep them placed one above the other on the peripheral walls of the smoke duct, said halves and said hinge being integrally moulded of an elastic plastics material.

Embodiments of the present invention will now be described by way of example with reference to the accompanying drawings in which:

Fig. 1 is a front view of a cigarette holder

Fig. 2 is a plan view of Fig. 1;

Fig. 3 is a perspective view of the holder opened into two parts with its cigarette receptacle member detached;

Fig. 4 is a sectional view taken along line I —I of Fig. 2;

Fig. 5 is an enlarged sectional view taken along line II — II of Fig. 2; and

Fig. 6 is a sectional view of another embodiment.

As apparent from the drawing, a holder comprises a pair of pipe halves, 1, pivotally connected by a hinge, 2 fitted at the rear end of the holder said hinge 2 having on the inside a pair of laterally opening passageways 3_1 meeting each other at right angles to the longitudinal direction of the axes of the pipe halves 1 and 1. The halves 1 and the hinge 2 are integrally formed of plastics material, preferably polypropylene, having an elasticity sufficient to bear repeated hingeing actions.

The hinge 2 is made sufficiently thick to bear said repeated hingeing actions, but in the drawing it is shown in the form of a thin tonguelike piece connected to the end of the mouthpiece 11 of the holder. The passageways 3_1 are formed by the slots enclosed with the mouthpiece 11 and the hinge 2, and take the form of flat oval slots constituted by the grooves 3 and the inside of the hinge 2 when the halves 1 are placed one above the other.

When the halves 1 are placed one above the other, they form a smoke duct 4 extending longitudinally along the inside of the halves 1 from the end of the holder on the side opposite to the hinge 2, that is the fore end, to the hinge 2, said smoke duct 4 terminating in said inlets 3_1. The halves 1 are provided on the peripheral walls 6 of the smoke duct 4 with a coupling means for maintaining a superposed relationship therebetween. The coupling means are continuous projected walls 8 and grooves 7, said walls being formed on the peripheral walls 6 on both sides of the smoke duct 4 of one half 1 and said grooves being formed on the peripheral walls 6 on both sides of the smoke duct 4 of the other half 1 to receive the projected walls 8 and 8 therein.

When the halves 1 are superposed, they constitute at the fore end thereof a cigarette receptacle portion for indirectly or directly holding a cigarette. The cigarette receptacle portion shown is an example of one indirectly holding the cigarette in which the fore ends 5 of the halves 1 have a reduced diameter over which a hollow cylindrical cigarette receptacle member 9 is press fitted to combine the halves 1 and to protect the portions 5 against damage due to heat from the tobacco 10. But if the coupling force between both halves 1 is sufficient, the cigarette receptacle member 9 is not always necessary, and the portions 5 may be used directly as a cigarette receptacle portion by coating the inside of the fitting portions 5 with fire-proof paint or inlaying the same with a fireproof ring. The hinge 2 may be of any shape besides the one shown, so far as it is adapted to maintain sufficient elasticity to bear the repeated hinging actions of the halves 1. The smoke ducts 4 have different inner diameter along their lengths in such a manner that the middle of the holder has a large inner diameter 4_2, the cigarette receptacle fitting portion at the fore end has a medium inner diameter 4_1 and the rear end portion is small in inner diameter 4_3. This is intended to remove the harmful constituents from the smoke by detachably fitting a tar removing filter 12 of a tar removing material such as a fibre, silica gel or the like filter in the large diameter duct portion 4_2. The smoke duct 4 need not always be fitted with such a filter 12, and it may have the same diameter throughout the length of the holder. The inlet grooves 3 allow the use of a semi-circular or any other desired shape, besides the flat oval one shown, that changes the direction of smoke and diffuses the smoke into the mouth.

The grooves 7 and the projected walls 8 formed as a coupling means are shown as the ones continued along the peripheral walls 6. This is intended to make the coupling force of the halves 1 sufficient and to prevent leakage of the tar from the smoke ducts 4 and make draught of smoke sufficient, and when the peripheral walls 6 are sufficient in thickness, it is desirable to increase the coupling force of the walls by the use of keyways 7_1 and keys 8_1 formed in the centre of each wall end surface as shown in Fig. 6. When the coupling of the pipe halves 1 is effected by the use of the cigarette receptacle member 9, the grooves 7 and projected walls 8 need not extend continuously along the wall 6.

When smoking with a holder as described, the smoke of a cigarette 10 strikes against the inner wall of the hinge 2 after it has passed through the smoke ducts 4, and then passes through the inlets 3_1 facing in the direction at right angles to the inner wall of the hinge 2 and is diffused into the mouth. Accordingly the smoke has been decreased in speed by the time it reaches the throat and the bronchus, has become mild in stimulating action on the mucous membrane of the interior of the throat and, thus can deter the harmful effects of to-

bacco. Another characteristic feature of the holder described lies in the fact that the whole of the holder is made of synthetic resin having properties which enable it to withstand repeated hinging actions without fracture. Accordingly the construction described not only prevents the holder from being unreasonably split into two parts during use but due to the efficient coupling of the halves also eliminates the possibility of the nicotine tar in the smoke ducts 4 leaking from the coupling portions of the halves 1 because the creeping distance (on the keyway and key surfaces of the coupling means formed) on the peripheral walls 6 of the smoke ducts of the halves 1 is great. When the holder halves are pressed together to allow removal of the cigarette receptacle member, they can easily be split into upper and lower sections so that the nicotine tar remaining in the smoke ducts 4 can be removed or washed away with ease, with the result that smokers can have draughts of fresh smoke passing through the clean duct 4, thus being released from the nicotine tar odour incidental to pipe smoking. Furthermore, since the halves 1 of the invention are of the construction described, the hinge 2 and the halves 1 can be made on a mass production basis by injection moulding.

WHAT I CLAIM IS:—

1. A holder for a cigarette or tobacco pipe comprising superposed upper and lower halves and a hinge for connecting said halves at one end thereof, said halves forming longitudinally on the insides thereof a smoke duct extending from the fore end of the holder remote from said hinge, to the hinge, said hinge having on the inside thereof a pair of lateral passageways extending from the sides of the holder and meeting at the longitudinal axis of the holder at right angles thereto said passageways communicating with said smoke duct, said halves having coupling means to keep them placed one above the other on the peripheral walls of the smoke duct, said halves and said hinge being integrally moulded of an elastic plastics material.

2. A holder according to Claim 1, wherein the hinge is provided in the shape of a tongue at the end of each half of the holder.

3. A holder according to Claim 1, wherein said passageways are oval in cross section and are formed by grooves respectively formed on the insides of the halves.

4. A holder according to any one of Claims 1 to 3, wherein said coupling means comprises continuous projected walls and grooves adapted to fit over said projected walls, said continuous projected walls being formed on the peripheral walls on both sides of the smoke duct of one half and said grooves being formed on the peripheral walls on both sides of the smoke duct of the other half.

5. A holder according to any one of Claims 1 to 3 wherein said coupling means comprises a keyway and a key, said keyway being formed on the peripheral walls on both sides of the smoke duct of one half and said key being formed on the peripheral walls on both sides of the smoke duct of the other half.

6. A holder according to any one of the preceding Claims, wherein, when said pipe halves are superposed one above the other, a hollow cylindrical cigarette receptacle member is fitted over the fore ends of the halves.

7. A holder according to any one of Claims 1 to 5, wherein, when said halves are superposed one above the other, the fore ends of the halves form a cigarette receptacle portion, said receptacle portion having applied over the inside thereof a fire-proof paint or being inlaid with a fire-proof ring.

8. A holder according to any one of the preceding Claims, wherein said smoke duct communicates with the lateral passageways and has sections of different inner diameters in the manner that the fore end portion of the pipe is medium in inner diameter, the middle portion of the pipe is large and the rear end portion is small in inner diameter.

9. A holder according to Claim 8, wherein said smoke duct of a large diameter has a filter detachably fitted therein, said filter being made of a nicotine tar removing material such as silica gel or a fiber filter.

10. A holder according to any one of the preceding Claims, wherein said halves, hinge, and coupling means are integrally moulded of polypropylene by injection moulding.

11. A holder for a cigarette or tobacco pipe substantially as hereinbefore described with reference to the Figs. 1 to 5 or Fig. 6 of the accompanying drawings.

H. D. FITZPATRICK & CO.,
14—18 Cadogan Street,
Glasgow, C.2. and
27 Chancery Lane,
London, W.C.2.

Printed for Her Majesty's Stationery Office by the Courier Press, Leamington Spa, 1971.
Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

bacco. Another characteristic feature of the holder described lies in the fact that the whole of the holder is made of synthetic resin having properties which enable it to withstand repeated hinging actions without fracture. Accordingly the construction described not only prevents the holder from being unreasonably split into two parts during use but due to the efficient coupling of the halves also eliminates the possibility of the nicotine tar in the smoke ducts 4 leaking from the coupling portions of the halves 1 because the creeping distance (on the keyway and key surfaces of the coupling means formed) on the peripheral walls 6 of the smoke ducts of the halves 1 is great. When the holder halves are pressed together to allow removal of the cigarette receptacle member, they can easily be split into upper and lower sections so that the nicotine tar remaining in the smoke ducts 4 can be removed or washed away with ease, with the result that smokers can have draughts of fresh smoke passing through the clean duct 4, thus being released from the nicotine tar odour incidental to pipe smoking. Furthermore, since the halves 1 of the invention are of the construction described, the hinge 2 and the halves 1 can be made on a mass production basis by injection moulding.

WHAT I CLAIM IS:—

1. A holder for a cigarette or tobacco pipe comprising superposed upper and lower halves and a hinge for connecting said halves at one end thereof, said halves forming longitudinally on the insides thereof a smoke duct extending from the fore end of the holder remote from said hinge, to the hinge, said hinge having on the inside thereof a pair of lateral passageways extending from the sides of the holder and meeting at the longitudinal axis of the holder at right angles thereto said passageways communicating with said smoke duct, said halves having coupling means to keep them placed one above the other on the peripheral walls of the smoke duct, said halves and said hinge being integrally moulded of an elastic plastics material.

2. A holder according to Claim 1, wherein the hinge is provided in the shape of a tongue at the end of each half of the holder.

3. A holder according to Claim 1, wherein said passageways are oval in cross section and are formed by grooves respectively formed on the insides of the halves.

4. A holder according to any one of Claims 1 to 3, wherein said coupling means comprises continuous projected walls and grooves adapted to fit over said projected walls, said continuous projected walls being formed on the peripheral walls on both sides of the smoke duct of one half and said grooves being formed on the peripheral walls on both sides of the smoke duct of the other half.

5. A holder according to any one of Claims 1 to 3 wherein said coupling means comprises a keyway and a key, said keyway being formed on the peripheral walls on both sides of the smoke duct of one half and said key being formed on the peripheral walls on both sides of the smoke duct of the other half.

6. A holder according to any one of the preceding Claims, wherein, when said pipe halves are superposed one above the other, a hollow cylindrical cigarette receptacle member is fitted over the fore ends of the halves.

7. A holder according to any one of Claims 1 to 5, wherein, when said halves are superposed one above the other, the fore ends of the halves form a cigarette receptacle portion, said receptacle portion having applied over the inside thereof a fire-proof paint or being inlaid with a fire-proof ring.

8. A holder according to any one of the preceding Claims, wherein said smoke duct communicates with the lateral passageways and has sections of different inner diameters in the manner that the fore end portion of the pipe is medium in inner diameter, the middle portion of the pipe is large and the rear end portion is small in inner diameter.

9. A holder according to Claim 8, wherein said smoke duct of a large diameter has a filter detachably fitted therein, said filter being made of a nicotine tar removing material such as silica gel or a fiber filter.

10. A holder according to any one of the preceding Claims, wherein said halves, hinge, and coupling means are integrally moulded of polypropylene by injection moulding.

11. A holder for a cigarette or tobacco pipe substantially as hereinbefore described with reference to the Figs. 1 to 5 or Fig. 6 of the accompanying drawings.

H. D. FITZPATRICK & CO.,
14—18 Cadogan Street,
Glasgow, C.2. and
27 Chancery Lane,
London, W.C.2.

Printed for Her Majesty's Stationery Office by the Courier Press, Leamington Spa, 1971.
Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

