

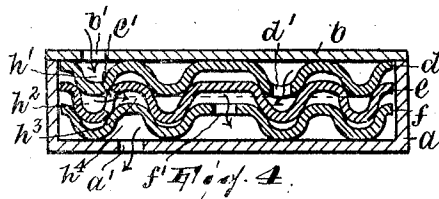
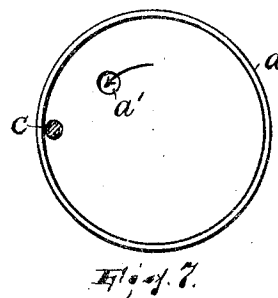
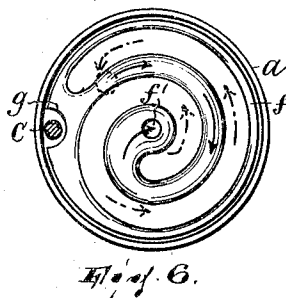
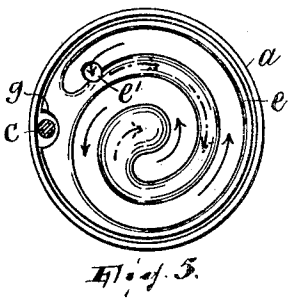
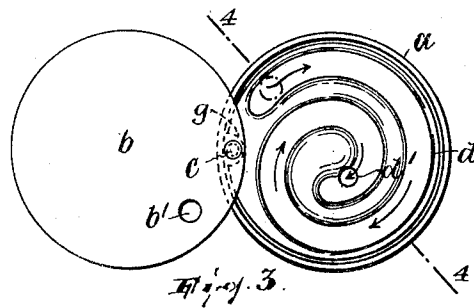
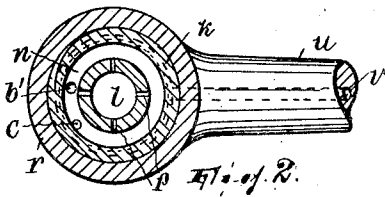
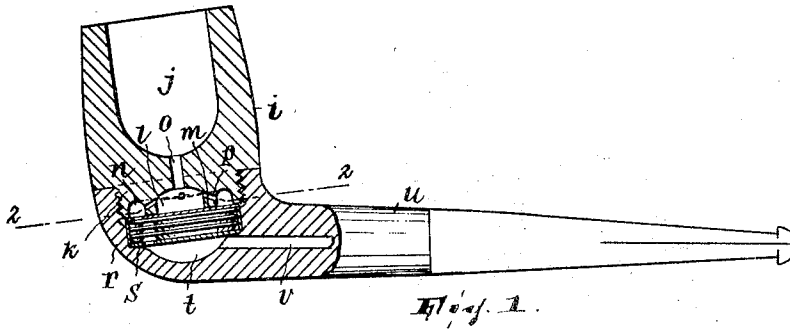
Dec. 11, 1923.

1,476,955

W. M. DE PARS

TOBACCO PIPE

Filed Jan. 23, 1922



WITNESS

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TOBACCO PIPE.

Application filed January 23, 1922. Serial No. 531,122.

To all whom it may concern:

Be it known that I, WILLIAM M. DE PARS, a citizen of the Republic of France, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Tobacco Pipes, of which the following is a specification.

This invention relates to tobacco pipes and it has for one of its principal objects to provide a tobacco pipe with means whereby within little space a long passage will be provided for the certain cooling of the smoke and depriving the same of its moisture and nicotine and whereby said means will be capable of being readily taken apart for cleaning the same and may be manufactured quite inexpensively. In the preferred construction the pipe is formed as to its bowl portion in two separable sections, upper and lower—the upper section having the tobacco chamber or bowl proper—and a further object is to form such a joint between said sections that while the smoke may readily pass from the tobacco chamber and so through the stem of the pipe to the mouth of the smoker any tobacco or ashes that is by suction drawn from said chamber will be trapped at a point where it may be readily removed upon separating said sections and where it will not clog the pipe.

In the accompanying drawing,

Fig. 1 is a view showing the improved pipe mainly in vertical section;

Fig. 2 is a horizontal sectional view on line 2—2, Fig. 1;

Fig. 3 shows in plan a certain capsule contained in the bowl of the pipe and having its cover swung to the open position to show the top disk therein;

Fig. 4 is a transverse section of the capsule; and

Figs. 5, 6 and 7 are top plan views of two of said disks and the empty capsule case with its cover removed.

A part of the smoke passage of the improved pipe is formed by a capsule best shown in Figs. 3 to 7. There is a circular case *a* closed at the bottom and having a disk-cover *b* which is pivoted to the post *c* upstanding from the bottom wall of the case near its perimeter so as to move in its own plane. In the case are arranged three laminated disks *d*, *e* and *f*, all three being cor-

rugated in such manner that the grooving produced as to either face thereof is spiral and all the spirals have the same pitch and approximately the same length, each spiral being generated from the center of the disk. The corrugating of the top and bottom disks *d* and *f* is the same (i. e., any diametric section of the disk *d* would present the same contour as any corresponding diametric section of the disk *f*) but the corrugating of the disk *e* is so formed that the grooves produced are somewhat deeper than those of the members *d* and *f*. The disks have edge notches *g* which, when the disks are nested in the case so that their corrugations intermesh as shown in Figure 4, receive the post *c* and so prevent the disks from turning out of their proper relative positions, i. e., where the outer ends of all the spirals are in substantially vertical coincidence. The closed capsule contains passage-ports—arranged in parallel planes and each in the present instance being a spiral coil—formed as follows: Beneath the cover *b* and in the top groove of the disk *d* a passage-portion *h*¹; beneath the disk *d* and in the top groove of the disk *e* a passage-portion *h*²; above the disk *f* and in the bottom groove of the disk *e* a passage-portion *h*³ and above the bottom of the case and in the bottom groove of the disk *f* a passage-portion *h*⁴. The passage-ports are connected to form a single passage by a hole *d*¹ in the disk *d* penetrating it at the bottom and near the inner end of its top groove, by a hole *e*¹ in the disk *e* penetrating it at the inner side and near the outer end of its top groove, and by a hole *f*¹ in the disk *f* penetrating it at the bottom and near the inner end of its underneath groove; and the intake to this passage is formed by a hole *b*¹ in the cover *b* which registers with the outer end portion of the top groove in the disk *d* and its outlet by a hole *a*¹ in the bottom wall of the case which registers with the outer end portion of the bottom groove in the disk *f*. By corrugating the disk *e* deeper than the disks *d* and *f* and by placing the opening *e*¹ at the side of the top groove thereof, so that the underneath groove as well as the top groove of this disk forms a passage-portion, the vertical dimension of the nested disks is reduced to the minimum.

The bowl of the pipe is formed in two

sections, upper and lower. The upper section *i* has the bowl proper or tobacco chamber *j* and a downwardly projecting exteriorly threaded plug *k*. The plug has a downwardly open chamber *l* and surrounding this chamber a circumferential seat *m* and surrounding said seat a groove *n*; the bowl has an axial port or smoke outlet *o* connecting chambers *j* and *l* and it also has one or more ports *p* extending from the top of the chamber radially downward to the groove *n*. The section *r* of the bowl has a recess *s* opening upwardly and in the lower part of which the capsule above described fits fairly snugly, as shown in Figure 1, said recess having a countersink *t* beneath the capsule and its upper portion threaded to engage the threaded plug *k* which is adapted to be screwed thereinto. When the capsule is in place there is formed in the lower section above the capsule a recess whose floor is the top of the capsule, and against this floor bears the seat *m* of the section *i*, so that the groove *n* is continuously sealed off from the chamber *l* under said seat and communication between the chamber and groove is afforded only by the relatively elevated ports *p*. When the capsule is in place its inlet *b'* registers with the groove *n* and its outlet *a'* is open to the countersink *t*. The lower section *k* has the usual stem *u* projecting therefrom and forming a mouth-piece and it also has the usual passage *v* for conducting the smoke from the countersink through the stem.

It will be seen that by my construction the smoke passage of the pipe is very materially increased on account of the spiral portion thereof, so that the smoke has ample time to cool and become deprived of its moisture and nicotine before it reaches the mouth of the smoker; that the major portion of this passage is included within comparatively little space; and that the several spiral portions are readily accessible for cleaning because they are formed between disks or plates that are separably assembled with each other.

Further that the bowl proper *j* will be free at all time from access thereto of moisture; and that the ashes or tobacco cannot clog any portion of the smoke outlet or passage of the pipe, any tobacco or ashes that are deposited through the port *o* on the top of the capsule being readily cleaned away upon removing the section *i* from the section *r* of the pipe and in no event interfering with the draught, because the ports *p* extend from the top of the chamber *l*.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is.—

1. A smoke-passage-forming means for a smoking pipe including a set of three laminated members lying in face to face contact with each other and having the intermediate

member forming between it and each of the other two members a part of the smoke passage.

2. A smoke-passage-forming means for a smoking pipe including a set of three laminated members and having one of each two adjoining members grooved and forming with the other of such two adjoining members and in said groove a part of the smoke passage.

3. A smoke-passage-forming means for a smoking pipe including a set of three laminated members lying in face to face contact with each other and having the intermediate member forming between it and each of the other two members a part of the smoke passage, the intermediate member having an opening connecting the two parts of said passage.

4. A smoke-passage-forming means for a smoking pipe having its passage formed in flat coils arranged in substantially parallel planes and forming continuations of each other.

5. A smoke-passage-forming means for a smoking pipe having its passage formed in flat spiral coils arranged in substantially parallel planes and having their corresponding ends connected with each other.

6. A smoke-passage-forming means for a smoking pipe including a plurality of laminated plates having intermeshing corrugations, the smoke passage being between the plates and between the corrugations of one plate.

7. A smoke-passage-forming means for a smoking pipe including a plurality of laminated plates having intermeshing corrugations formed around a common center, the smoke-passage being between the plates and between the corrugations of one plate.

8. A smoke-passage-forming means for a smoking pipe including a corrugated plate and means at each side thereof covering the groove between corrugations and thereby forming a smoke-passage portion on each side of the plate, said plate having an opening connecting one groove with the other and thereby connecting the two passage portions.

9. A plurality of nested separate members to be placed in a smoking pipe and together forming a tortuous smoke passage.

10. A smoking pipe having a removable capsule therein forming a part of the smoke passage thereof and including a case having a smoke inlet and outlet and removable means therein forming therewith a deviating smoke passage having its ends communicating with the inlet and outlet.

11. A smoking pipe having a removable capsule therein forming a part of the smoke passage thereof and including a case having a smoke inlet and outlet and separate members removably arranged therein and to-

gether forming a deviating smoke passage having its ends communicating with the inlet and outlet.

12. In a smoking pipe, the combination
5 of upper and lower members having one a projection and the other a recess receiving and forming a joint with the projection, the upper member having a tobacco bowl and a downwardly open chamber open toward the
10 lower member and a circumferential seat around said chamber and also a port connecting said bowl and chamber and a smoke passage leading from the chamber to the exterior at a point outwardly of the seat
15 and the lower member having a floor against

which the seat bears and a smoke passage communicating with the first smoke passage and leading to the exterior of said member.

13. A smoking pipe having successive portions of its smoke passage arranged around
20 a common axis and communicating with each other substantially at the axis.

14. A smoking pipe having successive portions of its smoke passage arranged around
25 and each extending to a common axis and communicating with each other at a point remote from the axis.

In testimony whereof I affix my signature.

W. M. DE PARS.