

This invention relates to tobacco pipes and to that variety of pipe which is provided with a removable tube.

The invention consists of a special form of such removable tube.

According to the invention the removable tube consists of a simple or parallel undivided tube which is cut away at its front end so as to conform or more or less conform to the shape of the bottom of the bowl of the pipe, and the interior of the mouth-piece of the pipe is formed near the 'lip' with a shoulder for the abutment of the rear end of the tube. The tube is made of such length that it will, when the mouth-piece of the pipe is pushed or screwed home, bear with the extremity of its cut-away front end against the central part of the bottom of the bowl and with its rear end against the shoulder provided near the lip. The tube, which would at its front part fit a corresponding bore formed in the bowl portion of the stem, may be made of aluminium, steel or other appropriate metal or alloy of a non-absorptive nature.

The invention is illustrated by the accompanying drawings.

Of these drawings, Fig.1 is a longitudinal section of a straight pipe provided with a tube according to the invention. Figs.2, 3 and 4 are an exterior view, a longitudinal section and a transverse section of the form of tube shown in Fig.1. Fig.5 is an exterior view of a tube somewhat differing from the tube shown in Figs.1, 2 and 3. Fig.6 is a longitudinal section illustrating the application of the invention to a bent pipe.

In all of the figures, where the parts are used, 1 is the bowl, 2 is the stem, 3 is the mouth-piece and 4 is the lip of a tobacco pipe. 5 is a tube constructed according to the invention. This tube 5, which is loose or separate from the pipe and may be of any suitable metal, such as aluminium, which is perhaps the best metal owing to its lightness and other properties, is made of such length that it will, when inserted in the pipe, bridge the distance obtaining between the bowl 1 and the lip 4 and thus form a closed conduit, separate from the materials of the pipe, for the passage of the smoke.

The front end of the tube 5 is cut away, for instance by chamfering, as shown in Figs.1, 2 and 3, or by stepping, as shown in Fig.5, so that said front end will conform or more or less conform to the shape of the bottom of the bowl 1. Its upper edge should not protrude into the bowl of the pipe but end a short distance from the bowl. Thus a proper draught is ensured and an uninterrupted passage provided for the smoke into the interior of the tube 5. As will be seen from an inspection of Fig.1 the tube 5 is made of such length that when the mouth-piece 3 is pushed or screwed home the front extremity 5' of the tube 5 will bear against the central part of the bottom of the bowl 1, whilst the rear face 5" of said tube will, by reason of its front extremity bearing against the bottom of the bowl 1, be forced against the shoulder 4' at the lip 4 and make a tight joint therewith.

As will be seen from an inspection of Fig.1, the stem of a pipe intended to be used with a tube 5 would be

provided with a frontal bore 2' which would snugly fit the exterior of the tube, while the mouth-piece 3 of the pipe would be formed with a bore 3' which would either be made of a size somewhat greater than the exterior of the tube, as shown in Fig.1, or be of such size as to snugly fit the exterior of the tube.

The tubes 5 can also be used in bent pipes, as shown in Fig.6. In this case the bore 3' provided in the mouth-piece would be made of greater diameter than the exterior of the tube 5 with which it is to be used so as to allow of the insertion of said tube in the mouth-piece of the pipe and the tube accommodating itself to any slight variation in the curvature of the mouth-piece.

The tubes 5 when they have become fouled on their interior surfaces can either be thrown away, or be cleaned by boiling in water or in any other way.

What I claim as my invention is:-

1. An improvement relating to tobacco pipes consisting of a separate imperforate parallel-sided metal tube having its front end cut away to more or less conform to the shape of the bottom of the bowl of the pipe and adapted when inserted in the bowl portion of the stem and in the mouth-piece of a pipe to extend into and bear with its cut-away end against the bottom of the bowl, to fit the bowl portion of the stem and to bear against a shoulder formed at the lip, substantially as described.

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2. A tobacco pipe provided with a removable imperforate parallel-sided metal tube which fits the bowl portion of the stem of the pipe, is cut away at its front end so as to conform to or more or less conform to the shape of the bowl of the pipe, and bears with its cut-away end against the bottom of said bowl and with its rear end against a shoulder formed in the mouth-piece of the pipe at the lip thereof, substantially as described.

Signed at London this 28th day of April 1914.

Signed Dunning

In the presence of:-

C. F. Ennis
Chas. J. Falconer

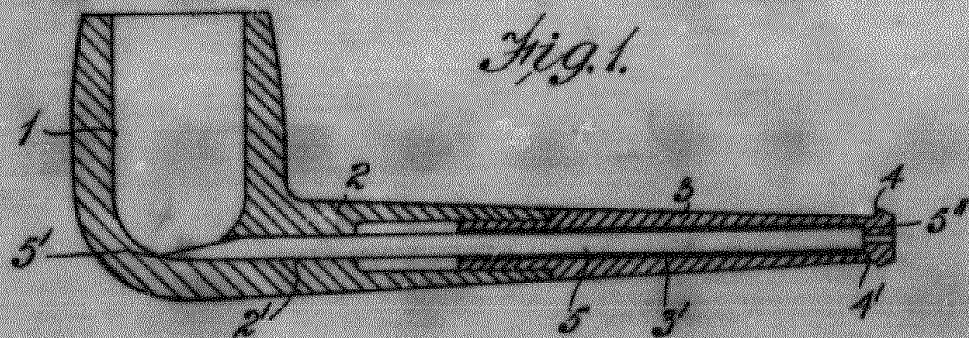


Fig. 1.

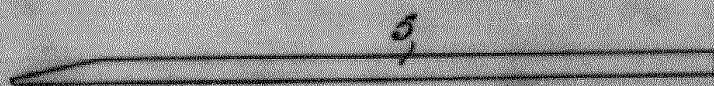


Fig. 2.



Fig. 3.



Fig. 5.

Fig. 4.

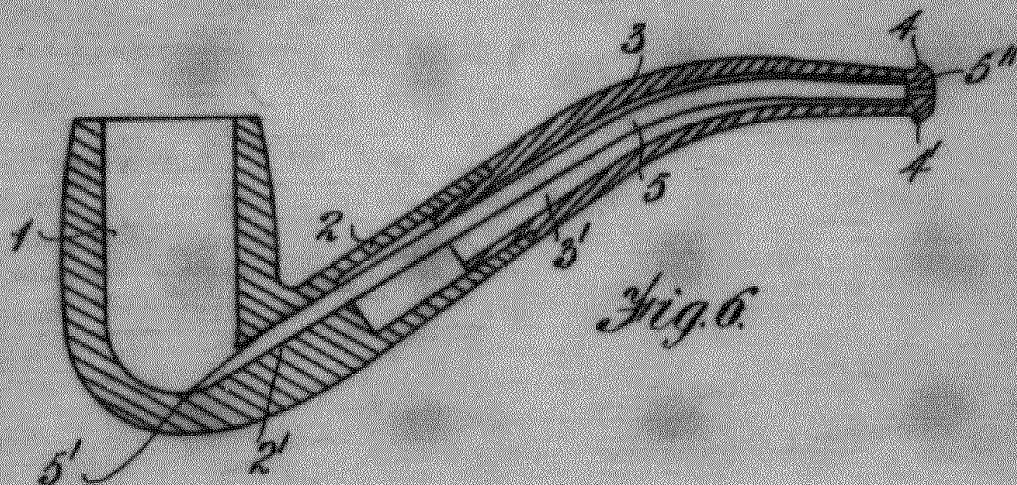


Fig. 6.

Witnesses

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E. P. Hall

Certified to be the drawings referred to
in the application herein entered

Toronto, May 8th, 1914

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attys