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MANUFACTURE OF WOODEN TOBACCO
PIPE

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This invention relates to the manufacture of wooden tobacco pipes from cheaper woods than the briar root wood ordinarily used. Heretofore pipes have been made of briar because it is practically the only wood material which will sufficiently resist burning under the conditions it must withstand in a pipe. Owing to the peculiar structure of briar root, it is difficult to produce a finished pipe with it without blemishes. For one perfect pipe, there are many blemished ones, and the latter cannot be sold at good prices. Further, briar root wood, being less available, only the root being used, is a more expensive material than the ordinary woods of commerce. It is an object of the present invention, so to treat the ordinary woods of commerce, wood from the trunk and branches of a tree, that they will be suitable for a tobacco pipe. The same treatment will also improve the lasting quality of root wood such as briar.

Common woods such as maple, birch, poplar and bass wood, when made into pipes, soon burn through under the conditions obtaining when tobacco is smoked in them. These conditions are unique and differ from that encountered when wood is subjected to fire and heat under the ordinary conditions of combustion as I have proved by experiment. I have subjected pipes of the common woods, which were impregnated with chemicals usually the most effective for fireproofing under the ordinary conditions of combustion, to smokings with tobacco. They soon charred through. Some of the chemicals tried were mono-ammonium phosphate, ammonium sulphate, sodium vanadate, and borax, all with very poor results. But when pipes were made of the various woods impregnated with boric acid they stood up well under very many smokings. Under ordinary conditions, when wood is subjected to heat and fire, the chemicals mentioned above are by far more effective as fireproofing agents than boric acid. But under the conditions of the smoking of tobacco in a pipe, boric acid will make the wood of the pipe endure for a very large number of smokings, while the other chemicals afford little if any protection. These experiments indicate that there is something peculiar surrounding the smoking of tobacco in a pipe and that boric acid meets the situation, while chemicals ordinarily far more effective in fireproofing do not.

In accordance with the present invention, the wood forming the pipe is impregnated with boric acid by the usual methods. For example, a com-

mon wood, such as previously mentioned, is used for the pipes and boiled for six hours in a 12 per cent boric acid solution in water. Among the usual methods employed in the art of impregnating wood with a chemical is one in which the wood is boiled in a solution of the chemical of the desired strength, the boiling taking place in a closed system whereby there is substantially no loss by evaporation and consequently no substantial increase in strength of the solution during the boiling. Under these conditions, boiling the wooden portion of the pipe in a solution of less concentration than 12 per cent is not as effective in rendering it resistant to burning when tobacco is smoked therein, than when a solution of 12 per cent or greater strength is employed. It is also preferable to impregnate the wood of the pipe after it has been formed at least approximately into pipe form.

As is usual in tobacco pipes, the bowl and shank are of wood, while the bit may be of other material. Boric acid in the wood does not interfere with the pipe making machinery and helps the finishing of the wood of the pipe. Further, it does not interfere with the flavor of the tobacco smoke which is a very important consideration.

I claim:

1. A process of rendering wood resistant to burning under the conditions obtaining in a tobacco pipe when smoked, consisting in boiling said wood in about a 12 per cent solution of boric acid in water.

2. A process of rendering wood resistant to burning under the conditions obtaining in a tobacco pipe when smoked, consisting in boiling said wood in a water solution of boric acid of not less than substantially 12 per cent strength.

3. A process of rendering the wooden bowl of a tobacco pipe resistant to burning under the conditions obtaining when tobacco is smoked therein, consisting in boiling, in a water solution of boric acid of not less than substantially 12 per cent strength, the wood of the bowl, when formed first substantially into bowl form.

4. An article of manufacture comprising a tobacco pipe having a wooden bowl impregnated with a quantity of boric acid not less in amount than the quantity obtained from boiling said bowl for several hours in a water solution of boric acid of not less than substantially 12 per cent strength, whereby said bowl is rendered resistant to burning under the conditions obtained when tobacco is smoked therein.

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