

UNITED STATES PATENT OFFICE.

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SMOKING MIXTURE.

No drawing.

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To all whom it may concern:

Be it known that I, FREDERICK J. BOSSE, a citizen of the United States, residing at Norristown, in the county of Montgomery and State of Pennsylvania, have invented a certain new and useful Improvement in Smoking Mixtures, of which the following is a specification.

My invention relates broadly to smoking tobacco and more particularly to a smoking mixture.

The object of this invention is to improve manufactured tobacco as used for smoking purposes to render it more agreeable to the taste and less injurious to health.

My invention will be more readily understood by a consideration of the chemical changes which take place in the tobacco while the smoking is progressing. The smoking of tobacco, either in pipes or as cigars or cigarettes is a process of dry distillation. There are three classes of products which are formed during this process:

1. Ashes, containing all mineral matter which is practically neutral.

2. Liquids, being of a more or less offensive nature.

3. Gases, being of a more or less aromatic nature.

The relative percentage of these products differ in various instances, being dependent on variety of tobacco, dampness, and whether smoked in pipes, or as cigars, or cigarettes. Manufacturers have endeavored to produce a tobacco which will give out a minimum percentage of the offensive liquids, but they have not succeeded in eliminating them completely.

The demands of smokers have resulted in improved pipes that will separate the liquids before they can reach the mouth of the smoker. Mouthpieces have been provided for cigars and cigarettes to limit the offensive liquids. However, all of these arrangements are only partially effective and separate the liquids only after they have passed through layers of fresh tobacco, such as is located in the lower portion of a pipe bowl, or at the mouth-end of cigars or cigarettes. These offensive liquids saturate that layer of tobacco which has not yet been reached by the fire, and this saturated tobacco therefore

smoulders at a lower temperature than that ruling at the point where fresh tobacco is burning. This process of uneven and slow combustion tends to produce even larger amounts of offensive liquids.

My improvement consists in eliminating the offensive liquids at the point, or near the point, of combustion. In carrying out my invention I mix the tobacco with a substance called diatomaceous earth, kieselguhr, or infusorial earth, the lower grades of which are known as silicious marl, tripoli, rottenstone, mountain-meal and others. Diatomaceous earth is almost chemically pure silica, made up from the microscopical shells of diatoms of various sizes and shapes. This material has a remarkable absorptive power for liquids due largely to the hollow characteristic shape of the shells and their ribbing and perforations. A good grade of diatomaceous earth will absorb from five to seven times its weight of water, or correspondingly of other liquids. The absorptive power is far in excess of mere surface adhesion.

In preparing the smoking mixture for use in pipes and in cigarettes, I mix the diatomaceous earth in quantity from one to five per cent by weight with the manufactured tobacco. The variations in percentage of diatomaceous earth depend directly on the grade of tobacco used and the degree of dampness desired. In preparing cigars, the diatomaceous earth is in some instances applied as a dry powder between the leaves of the cigar and in other instances it is mixed only with the filler in the cigars. In the manufacture of cigars the powdered diatomaceous earth may also be mixed with the water that is used for dampening the leaf tobacco in the process of rolling. The product obtained in this way contains the finely powdered diatomaceous earth distributed between the leaves of the rolled tobacco.

Having thus described my invention what I claim is:

A smoking mixture comprising tobacco and diatomaceous earth distributed there-through whereby said earth absorbs moisture from said tobacco during the process of combustion.

FREDERICK J. BOSSE.