## United States Patent Office.

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## CHEMICAL COMPOUND FOR TREATING TOBACCO.

SPECIFICATION forming part of Letters Patent No. 475,737, dated May 24, 1892.

Application filed November 23, 1891. Serial No. 412,845. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. YINGLING, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, 5 have invented certain new and useful Improvements in Chemical Compounds for Treating Tobacco, of which the following is a specification.

This invention relates to an improved comro pound for treating tobacco; and it has specially for its object to furnish a composition of matter which will act chemically upon smoking-tobacco to neutralize the nicotine and at the same time improve it by render-15 ing it milder, preventing it from becoming unduly dry and tasteless, and improving its flavor for use in a pipe or for the fillers of

cigars, cigarettes, or cheroots.

My improved compound consists of the fol-20 lowing ingredients, to wit: gallic acid, tannic acid, powdered extract of geranium, and powdered extract of licorice. These may be employed in varying proportions to suit the character of the tobacco to be treated; but for gen-25 eral purposes for treating tobacco of ordinary grades I have found the ingredients in equal parts, by weight, to answer. These in the form of powder are intimately mixed and may be used in a dry state and sprinkled 30 over the tobacco or mixed thoroughly therewith; or an infusion or decoction of the powder may be used and the tobacco dipped therein, or the tobacco may be sprinkled or sprayed with the infusion or decoction, so as to be 35 thoroughly permeated thereby, the tobacco being afterward dried to a proper extent, so as to bring it to a condition for the filling of cigars, cigarettes, and cheroots, or for ordinary smoking purposes. It is evident that the 40 amount of the infusion employed may be varied indefinitely without departing from my invention. For cigars, however, I generally employ the infusion of such strength as to apply about one ounce of the compound com-45 posed of tannic and gallic acids, pulverized licorice and geranium to a quantity of tobacco sufficient for five thousand cigars. The same proportion will also answer for treating the tobacco for general smoking purposes with the

50 infusion. Any suitable flavoring material or 1

nervine may be added to the compound, if desired, to further improve the smoking qualities of the tobacco.

The chemical action of my improved compound in connection with the tobacco during 55 smoking is as follows: The gallic acid during the burning gives out carbonic-acid gas, which neutralizes the ammonia developed in the burning tobacco, while the tannic acid neutralizes the alkaloid nicotine of the tobacco. 60 The licorice extract serves to prevent the tobacco from becoming too dry and holds the tannic and gallic acids therein before smoking and takes away the bitter acid taste, if any, on the tip or end of cigar placed in the 65 smoker's mouth, besides imparting a pleasant flavor and tending to modify the smoke-products, rendering them less acid and the tobacco consequently sweeter and milder.

When employing a flavoring material with 7° the compound, I prefer to use the tincture tolu and valerian, combined or separated, as

they are harmless and pleasant.

An infusion of gall gathered from the oaktrees of this country may be added to the com- 75 pound, if desired, where very rank tobacco is employed, to further neutralize the nicotine and ammonia, or an infusion or decoction of oak-bark may be employed, as it contains the tannic and gallic acid properties and is less 80 expensive than either of the other acids proposed.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is— A compound to be applied to smoking-tobacco, consisting of the following ingredients: gallic acid, tannic acid, extract of geranium, and extract of licorice in about the proportions set forth, whereby the alkaloid of the 9° tobacco and the ammonia produced in burning the same are neutralized and the deleterious effects of the tobacco lessened, substantially as specified.

In testimony whereof I affix my signature in 95 presence of two witnesses.

GEORGE S. YINGLING.

Witnesses:

W. S. WAGNER, R. L. CARLE.