

UNITED STATES PATENT OFFICE.

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METHOD OF TREATING TOBACCO AND TOBACCO PRODUCTS, &c.

SPECIFICATION forming part of Letters Patent No. 591,129, dated October 5, 1897.

Application filed March 24, 1893. Serial No. 467,478. (No specimens.)

To all whom it may concern:

Be it known that I, HUGO GEROLD, doctor of medicine, a subject of the King of Prussia, German Emperor, and a resident of Halle, in the Kingdom of Prussia, German Empire, have invented a certain new and useful Method of Treating Tobacco or Tobacco Products to Prevent or Neutralize the Injurious Action of Nicotine Contained Therein; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The attempts hitherto made to prevent or neutralize the injurious action of nicotine contained in tobacco and tobacco products, as far as chemical agents have been used for that purpose, have had either no success at all or but a very limited success. It will not do to remove the nicotine from the tobacco, as the latter loses simultaneously with this removal its characteristic peculiarity and ceases in this sense to be a desirable article of consumption. All attempts heretofore made with the object of rendering the nicotine harmless have caused a considerable change in the specific peculiarity of the tobacco.

The well-known property of tannic acid being capable of preventing an injurious dissolution and distillation of nicotine has taught the expediency of impregnating tobacco-leaves with tannic acid. The quantity of tannic acid admitted must, however, correspond to the quantity of nicotine contained in the tobacco. With too little tannic acid the desired object is not attained and with too much the product is spoiled, as it will deteriorate in appearance, flavor, and smell, and become very brittle, which defects render it unfit for use as a commercial article. The first of the above-named defects can be obviated by treating the tobacco with a definite proportion of tannic acid, while the brittleness of the tobacco can be counteracted only by a careful selection of the agents. Essential oils, by means of which the natural suppleness can be restored, produce almost without exception an added spicy flavor and the formation of crystals which impart an undesired appearance, and also injuriously affect the brand in the case of cigars. These incon-

veniences are avoided and deleterious effects overcome by the employment of origany oil or the essential oil of *origanum vulgare* in solution with tannic acid, as it does not separate out solid masses nor impair the flavor of tobacco.

The best results with tobacco containing an average quantity of nicotine for the above-mentioned purposes are obtained if the following decoction is used: Fifteen grams of tannic acid are boiled with one and one-half kilograms of water until the weight is reduced to one kilogram, and then, with addition of thirty grams of the oil of *origanum vulgare*, at once taken from the fire. After this decoction has drawn for a few minutes it is filtered and cooled to about 16° centigrade. This infusion is then spread over about eight kilograms of tobacco-leaves containing an average quantity of nicotine. As soon as the tobacco has absorbed this infusion it is lightly pressed and with moderate heat is dried in an airy room so far as it is necessary for its direct employment for the manufacture of the various tobacco products.

I do not claim, broadly, the treatment of tobacco with tannic acid alone or in combination with other substances for destroying nicotine and altering specific qualities.

My invention resides, essentially, in the discovery of a new and useful composition and method of treating tobacco therewith, substantially as hereinbefore described, not for altering specific qualities or for aromatic purposes, which are the principal objects in view in treating tobacco according to common methods, but for the purpose of preventing the injurious action of nicotine and avoiding brittleness of the leaves.

The following advantages result from treating tobacco with a solution of the oil of *origanum vulgare* and tannic acid, substantially as hereinbefore described, to wit: First, the oil prevents the brittleness of the tobacco; second, it is not affected by the tannic acid; third, it does not in the mixture develop a resinous substance which itself tends to render the tobacco brittle; fourth, it does not affect the flavor of the tobacco, and, fifth, does not detract from the useful action of the tannic acid.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

5 The method of treating tobacco-leaves or tobacco products, substantially as hereinbefore described, which consists in impregnating the tobacco with a solution of tannic acid combined with the oil of *origanum vulgare*, whereby the injurious action of nicotine is

prevented and brittleness of the leaves is avoided.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HUGO GEROLD.

Witnesses:

CARL BORNGRAEBER,
MAGDALENA BOY.