

UNITED STATES PATENT OFFICE.

JONATHAN SMITH AND CHARLES R. MESSINGER, OF TOLEDO, OHIO.

IMPROVEMENT IN SPRAYING TOBACCO BY STEAM.

Specification forming part of Letters Patent No. **185,790**, dated December 26, 1876; application filed November 16, 1876.

To all whom it may concern:

Be it known that we, JONATHAN SMITH and CHARLES R. MESSINGER, both of Toledo, Ohio, have invented certain new and useful Improvements in the Method of Distributing Liquids through Tobacco, of which the following is a specification:

This invention relates to the preparation or treatment of tobacco in the leaf, or cut for chewing or smoking, by distributing through the same glycerine or other liquid substances for sweetening, aromatic, or other purposes.

This has heretofore been successfully accomplished by the employment of compressed air, in the manner substantially as shown and set forth in our patent of January 25, 1876, No. 172,666, reissued June 27, 1876, and numbered 7,195. Steam has also been used by us with various results. We first commenced to use it as an agent of distribution, as follows: We took an iron boiler suitable for the purpose, and then, placing the glycerine within it, attempted to force it out by heavy pressure of steam through a nozzle perforated with small holes; but we found there was too much condensation. We made a second attempt by placing the boiler at a height of about six feet from the floor, and allowing the glycerine, by means of a tube, to flow to a point where the steam would strike it after it had left the vessel. This we found would accomplish, in a measure, what we designed to effect, and felt satisfied that it could be used as a cheap method, although in some instances it

allowed the steam to condense and moisten the tobacco more than was desirable.

Our third attempt was to use steam in connection with the same sprayer we are now using for compressed air, and we found it can be used with a certain degree of success. The best way, however, to use steam is by employing the same in superheated form with a sprayer or apparatus substantially such as described in our said reissue. When so used, steam is as effective in producing the results as when compressed air is used.

The material can be applied by running through a cylinder, or by spreading the tobacco out on a table or the floor; but we deem it best to agitate the tobacco, so as to permit an equal distribution of the liquid used.

Having thus described our invention, and the manner in which the same is or may be carried into effect, what we claim as our invention is—

Atomizing glycerine or other liquid material used to moisten or sweeten tobacco by means of steam as such atomizing or distributing agent, substantially as herein set forth.

In testimony whereof we have hereunto signed our names this 3d day of November, A. D. 1876.

JONA. SMITH.
CHAS. R. MESSINGER.

Witnesses:

BYRON F. RITCHIE,
JOHN VAN GUNTON.