

980,583.

T. N. WRENN.
SMOKING PIPE.
APPLICATION FILED MAR. 12, 1910.

Patented Jan. 3, 1911.

Figure 1.

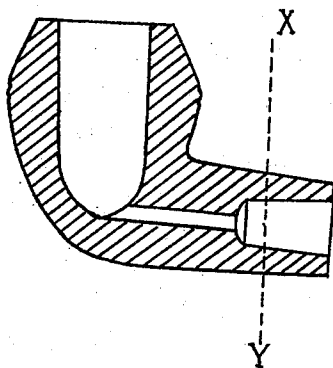
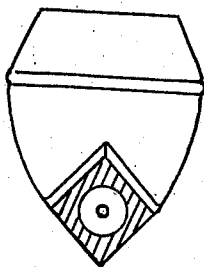


Figure 2.



Witnesses:

James P. Callender
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Inventor:

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UNITED STATES PATENT OFFICE.

THOMAS NOEL WRENN, OF CRANFORD, NEW JERSEY.

SMOKING-PIPE.

980,583.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed March 12, 1910. Serial No. 549,051.

To all whom it may concern:

Be it known that I, THOMAS N. WRENN, a citizen of the United States, residing at Cranford, in the county of Union and State of New Jersey, have invented a new and useful Improvement in the Art of Making Smoking-Pipes Out of Tobacco, of which the following is a specification.

My invention has to do with the preparation of tobacco and the manufacture therefrom of smoking-pipe bowls and aims at the production of a purer, more fibrous and stronger smoking pipe bowl than has been made by any other process heretofore discovered.

In the manufacture of smoking-pipe bowls out of tobacco by forming said bowls in molds it is necessary to so prepare the tobacco that it shall retain the shape imparted to it when removed therefrom. Hitherto this preparation has been accomplished by drying and pulverizing said tobacco and by mixing it with some binder or by moistening it with some adhesive fluid before pressing in the molds.

By the process which I have invented, instead of preparing the tobacco by drying and pulverizing, I am careful so to treat it that it retains its natural fibrous qualities, by virtue of which treatment I avoid the necessity of using any adhesive material and secure at the same time a pipe bowl of greater strength, porosity and serviceability. Specifically, the process whereby I thus prepare the tobacco for the molds and manufacture pipe bowls therefrom is as follows:—At the onset, I select only such tobacco as has not been previously treated in any way destructive of its fibrous qualities, for drying and pulverizing would be fatal to the process I employ. This tobacco is treated with an abundance of water and reduced to a pulp between dull knives so disposed as to draw the fibers and separate them without destroying them. It may be remarked that in the manufacture of paper pulp the same general process is employed for, there, as in this instance, it is essential to secure a fibrous pulp, and for the same reason, namely that the strength of the manufactured material is largely dependent upon the length and strength of the fibers. When the tobacco has been thus treated with water and thus reduced to a fibrous pulp I drain off the surplus water and transfer said tobacco pulp to molds

made of iron, steel or other metals, and expressly designed to receive it. Within these molds, the pulp is subjected to hydraulic or other mechanical pressure so applied as to form the pulp into strong bowls which may be removed from the molds and fitted with stems of amber, bone or other material and with collars or trimmings of silver or some other metal.

Now it is to be noted that the pipe-bowls which are thus produced possess certain material advantages over bowls made of tobacco as produced by any method heretofore invented or described. In the first place, bowls made of tobacco whereof the fibers are preserved are stronger and more durable than those made either partially or wholly of ground or pulverized tobacco in that the fibers are so interwoven and bound together that the structure is tougher and the material less liable to breakage. Moreover, owing to this fibrous structure it is unnecessary to introduce any foreign substance as a binder, and this results in greater purity of material, an advantage of importance, since the chief aim of these tobacco pipe-bowls is to obtain an article which possesses a pure tobacco flavor when smoked. Again, these fibrous bowls are more porous than bowls made of pulverized tobacco, for in the latter case, the tobacco being finely ground, all the interstices are closed up under pressure, and the resulting bowl is so compact as to be practically non-absorbent. Hence arises the final and most important advantage possessed by these pipe-bowls, namely, that of readily absorbing the products of the combustion of tobacco smoked in them. This quality is commonly called "caking" and is not possessed in any sufficient degree by smoking pipe bowls made of pulverized tobacco. It is well known, however, that this quality of "caking" is very desirable in smoking pipes and is a material advantage and one to be valued highly in the production of pipe-bowls from artificially prepared material. Clay and many other pipes do not "cake" readily, nor do those pipe bowls which are prepared by methods whereby the tobacco is pulverized previous to pressing in molds, for as has been pointed out this latter process of manufacture destroys the fibers and renders the bowl non-porous and non-absorbent.

In the accompanying drawing, Figure 1 is a longitudinal section of a pipe-bowl thus

produced, and Fig. 2 a cross-section of this pipe-bowl along the line X Y.

I am aware that prior to my invention, smoking pipe bowls have been made of tobacco and that Letters Patent have been granted on the composition thereof; and I, therefore, make no claim to the exclusive use of tobacco for such purpose.

I am also aware that a process of manufacture of tobacco smoking pipe bowls has been invented and described, but I am not aware that the express process of manufacture herein described by me has ever been invented; on the contrary, it would appear that no object has ever been made of the fibrous qualities of tobacco to this end, and that the treatment of tobacco so as to re-

tain and employ the fiber in the manufacture of smoking pipe bowls has never been described or invented.

I, therefore, claim—

1. The method of making smoke pipe bowls of tobacco which consists in reducing the tobacco to a fibrous pulp and in then pressing said pulp in molds.

2. The method of making smoke pipe bowls out of tobacco which consists in treating the tobacco with water and in reducing said tobacco to a fibrous pulp and in then pressing said pulp in molds.

THOMAS NOEL WRENN.

Witnesses:

WALTER H. BOND,

WM. ARTHUR BABSON.