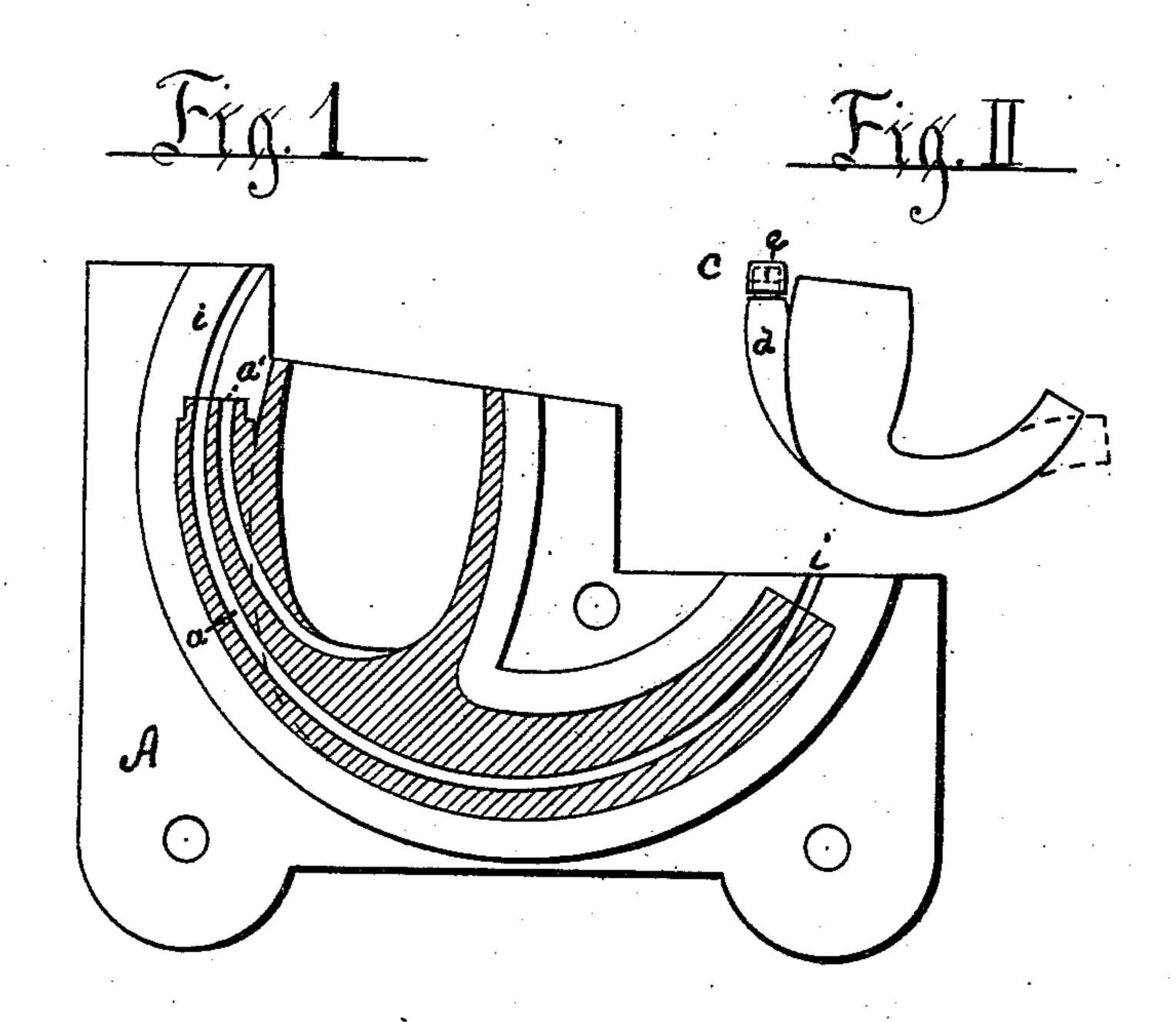
W. BAVIER.

Smoker's-Pipe.

No. 212,174.

Patented Feb. 11, 1879.



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By O Drake Atty.

## UNITED STATES PATENT OFFICE.

WILLIAM BAVIER, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN SMOKERS' PIPES.

Specification forming part of Letters Patent No. 212,174, dated February 11, 1879; application filed December 14, 1878.

To all whom it may concern:

Be it known that I, WILLIAM BAVIER, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Smokers' Pipes; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to smokers' pipes constructed with a view to preserving the tobacco in a dry state during the process of

smoking.

In certain instances an arrangement of straight and angularly-disposed passages communicating with drip-cups upon the lower side of the pipe have been employed for such purpose.

Under my improvement the pipe is formed with semicircular flues or passages, and an article superior in character and possessing the above advantages produced in a novel and

effective way.

The accompanying drawings illustrate the nature and character of the invention, in which Figure 1 represents the pipe in section, and the mold in which the same is cast; and Fig. 2 represents the pipe reduced in size, the dotted lines indicating that the stem of the pipe may be bent as may be desired after being removed from the mold, and while it is yet in a soft state.

Similar letters of reference indicate like

parts in each figure.

The invention consists in the peculiar construction and arrangement of the draft-flues a and a', and also of the mold A, and the process of making the pipe, as hereinafter set forth and described, to wit: The pipe is constructed with a curved flue, a, which, when the pipe is being molded and cast, must form a part of a perfect circle, as indicated in Fig. 1. This is rendered necessary in order that the core, which is composed preferably of spring-wire, may be withdrawn with facility

and without injury to the pipe, as is evident. The flue a' may be straight, when the construction of the pipe will admit of it, or curved, as shown in Fig. 1. The main passage or flue a, it will be observed, forms a continuous flue, beginning at or near the top of the bowl of the pipe, and terminating at the end of the stem of the bowl, while the flue a' begins at the same point, and terminates at the bottom of the cavity inside of the bowl, the two flues being practically united, and so forming one passage by means of a cap, c, as indicated in Fig. 2.

It will be observed that the bowl A is constructed with a slight projection, d, on the outside, in order to admit of the forming of the draft-passage, as shown; and at the top of said projection a nipple, e, is formed to receive the removable cap c, above referred to, which is screwed on, or otherwise adjusted, with sufficient space left between it and the top of the nipple to allow a free and unobstructed draft, as will be readily understood.

The essential and desirable feature that my improvement possesses is, that the tobacco is kept dry, and therefore the accumulation of nicotine, or other disagreeable matter, to a

very great extent, is avoided.

Should the flues become choked or obstructed, by removing the cap easy access is had to them, and by means of a broom-straw or small wire they can be freed in a moment.

The construction of the mold will be readily understood without further description by reference to Fig. 1, the grooves i, which are seen in the projecting ends thereof, being formed in order to guide and so facilitate the drawing of the cores, which is done before the pipe is removed therefrom.

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

ent, is—

1. The combination, in a pipe, of a semicircular or curved draft-passage following the curved contour of the bowl, the independent passage a', communicating with the bowl, both terminating at or near the top thereof, and the detachable cap c, whereby communication is formed between the two passages, as set forth.

2. The process herein described of molding or casting a pipe having a flue extending to, or nearly to, the top of the bowl—viz., of first forming said flue upon a line describing a portion of a true circle, as shown.

3. A mold constructed as described and shown, for the purpose of casting pipes or other articles having curved or semicircular

flues with solid cores, as set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

WM. BAVIER.

Witnesses:
OLIVER DRAKE,
P. J. INSLEE.