

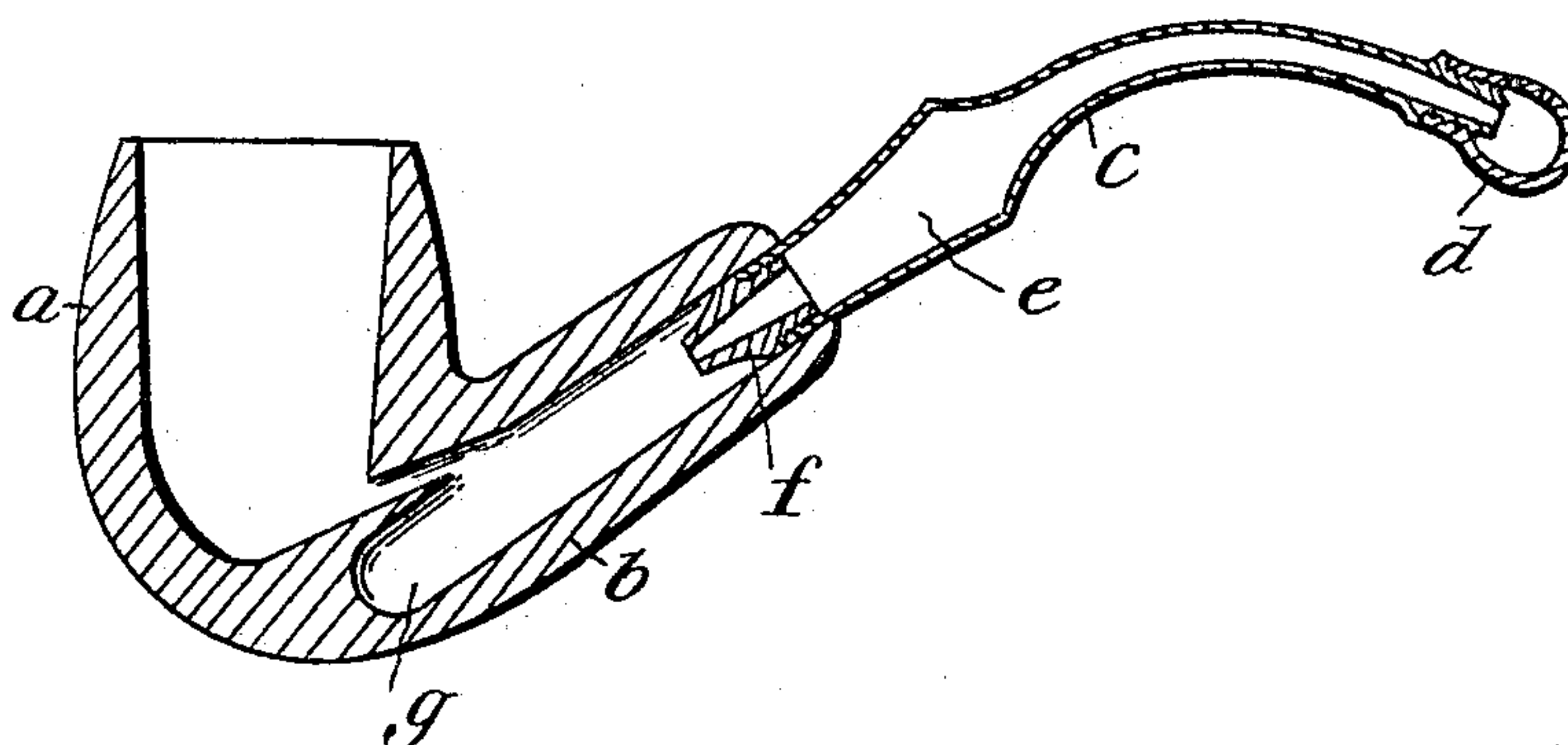
No. 818,820.

PATENTED APR. 24, 1906.

C. ELKIN.  
PIPE.

APPLICATION FILED NOV. 11, 1905.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*C. M. Sweeney*  
*J. D. Klinge*

*Inventor:*  
*Charles Elkin*  
*by Henry Albert*  
*Att'y*

# UNITED STATES PATENT OFFICE.

CHARLES ELKIN, OF NEW YORK, N. Y.

## PIPE.

No. 818,820.

Specification of Letters Patent.

Patented April 24, 1906.

Application filed November 11, 1905. Serial No. 286,922.

*To all whom it may concern:*

Be it known that I, CHARLES ELKIN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented or discovered certain new and useful Improvements in Pipes, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to an improvement in the pipe shown and described in my United States application, Serial No. 269,280, filed July 12, 1905, in the lower part of the stem of which, adjacent to the stem of the bowl, is formed a chamber in which the smoke is rarefied and cooled and purified by the distillation in said chamber of a considerable part of the injurious elements (including nicotin) contained in the smoke. This cooling and purifying chamber has a contracted inlet so as to provide for the proper rarefaction and cooling of the smoke to effect the condensation and distillation referred to; but in the manufacture of the improved pipes it has been found to be difficult to properly make these stems with the contracted inlets to the expansion and cooling chambers, for the reason that in boring the small inlet-holes in the ends of the stems some of the chips or shavings formed by the boring or drilling operations would get into the cooling chambers and could not very well be dislodged or removed therefrom. Moreover, with the old construction the chambers could not be readily cleaned by wiping out, owing to the very small inlets thereto, so that to properly cleanse the interiors of the chambers it was necessary to flood them with alcohol by immersion or otherwise. These difficulties of the old construction are obviated by the present invention, which comprises a removable perforated plug fitted to the lower end of the pipe-stem, and thus forming practically a part thereof, the hole through the said plug being small at its outer end to provide a contracted inlet to the expansion-chamber and flaring or enlarging thence inwardly, thus affording what may be termed a "taper" bore from its inner to its outer end. This removable plug preferably has a screw-threaded inner part fitting into the threaded lower end of the cooling-chamber in the pipe-stem, although it might have a plain fit therein, and the entrance to said chamber in which said plug fits is of sufficient size or diameter

to permit the chamber to be readily cleaned through said entrance when the plug is removed.

In the accompanying drawings, Figure 1 is a sectional view of a pipe embodying the present invention, and Fig. 2 is a perspective view of the removable plug.

Referring to the drawings, *a* denotes the bowl of the pipe, *b* the stem of the bowl, *c* the pipe-stem, and *d* the mouthpiece, all of these parts being of the general construction of the pipe embraced by my application hereinbefore referred to and in which the pipe-stem is provided at its lower part with the conical or upwardly-expanding cooling and condensing chamber *e*. In the present instance the contracted inlet to said chamber is through the removable plug *f*, screwed into the lower end of the stem *c* and provided with an outwardly-tapering bore or hole the outer end of which is small and the inner end of which is relatively large. This construction not only restricts the inlet of the smoke to the expansion and cooling chamber, but facilitates the downward drainage of the products of distillation into the chamber *g* in the stem of the bowl. The hole or bore in the lower end of the pipe-stem *c*, in which the plug *f* fits, is sufficiently large to permit the chamber *e* to be readily cleansed by the insertion of a small swab or other instrument when the said plug is removed. The plug *f* is preferably flattened at its sides, as shown, so as to be more readily grasped by the thumb and finger when it is to be turned in screwing and unscrewing. By partly unscrewing said plug, so that it will be retained in place by one or two threads only, the capacity of the cooling-chamber will be somewhat increased, as will be evident.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A pipe provided with a stem having an expansion or smoke-cooling chamber in its lower part, combined with a plug removably fitted to the lower end of said stem and having through it a bore or passage-way which is small at its lower or outer end to afford a contracted inlet to said chamber.

2. The combination with the stem *c*, having the chamber *e*, of the plug *f* screwed into the lower end of said stem and having a taper bore diminishing in diameter outwardly to afford a contracted inlet to said chamber.

3. The combination with the stem *c* having the chamber *e*, of the plug *f* screwed into the lower end of said stem and having a taper bore diminishing in diameter outwardly to  
5 afford a contracted inlet to said chamber, said plug having flattened sides to facilitate turning.

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

CHARLES ELKIN.

Witnesses:

RICHARD F. GARRETSON,  
G. B. MOYER.