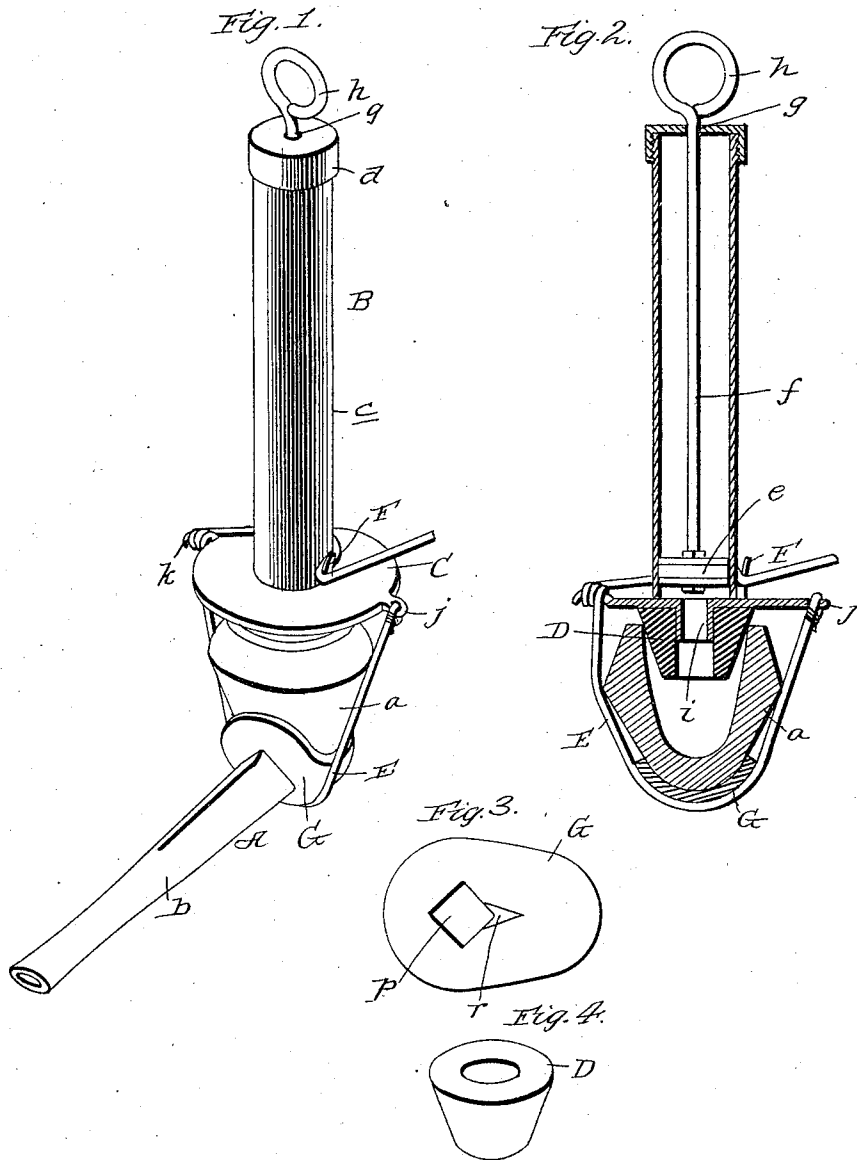


(No Model.)

J. J. SNYDER.
PIPE CLEANER.

No. 574,956.

Patented Jan. 12, 1897.



Witnesses:

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JOHN JACOB SNYDER, OF CHICAGO, ILLINOIS.

PIPE-CLEANER.

SPECIFICATION forming part of Letters Patent No. 574,956, dated January 12, 1897.

Application filed January 13, 1896. Serial No. 575,293. (No model.)

To all whom it may concern:

Be it known that I, JOHN JACOB SNYDER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pipe-Cleaners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in tobacco-pipe cleaners; and it is designed more particularly as an improvement upon the pipe-cleaner disclosed in my Letters Patent dated February 18, 1896, No. 554,739.

The general object of my present invention is to provide a pipe-cleaner of an exceedingly cheap and simple construction and one which may be quickly, easily, and securely attached to a pipe-bowl; and with these ends in view the invention will be fully understood from the following description and claim, when taken in conjunction with the annexed drawings, in which—

Figure 1 is a perspective view illustrating my improved cleaner as attached to a pipe-bowl. Fig. 2 is a vertical section of the same. Fig. 3 is a plan view of a piece of leather or other suitable material which is placed on the pipe to prevent the attaching-string from slipping; and Fig. 4 is a detail perspective view of the gasket or plug, which is designed to effect a water-tight connection between the pump-cylinder and the pipe-bowl.

In the said drawings similar letters designate corresponding parts in all of the views, referring to which—

A indicates a tobacco-pipe having the usual bowl *a* and stem *b*, and B indicates the pump of my improved cleaner. This pump may be of any construction suitable to the purposes of my invention, but I prefer to form it with the cylinder *c*, having the removable cap *d* at one end, and the piston *e*, having the rod *f*, extending through an aperture *g* in the cap *d* and provided with a suitable handle *h*, as illustrated. At its lower end the cylinder *c* of the pump is fixedly connected to or formed integral with a plate C, and this plate is provided with a central depending nipple or tube *i*, which is designed, in addition to connecting the interiors of the pipe-bowl and pump-

cylinder, to assist in holding the annular gasket or plug D against casual movement or displacement. The said gasket or plug D, which is preferably made of rubber, is suitably connected to the plate C, and is tapered, as illustrated, toward its lower end, so as to enable it to effect a water-tight connection between the pump-cylinder and the interior of pipe-bowls of various sizes.

The plate C at the lower end of the pump-cylinder *c* is provided with a lateral projection *j*, having an eye, as shown, for the connection of one end of a cord E, and at another point, preferably diametrically opposite the projection *j*, the plate is provided with a projection *k*, which is preferably curved, as shown, for a purpose presently described. Said plate C is further provided at a point adjacent to the pump-cylinder *c* with a preferably resilient device F, which may be properly termed a "clamp," since the attaching-string E is designed to be clamped between it and the cylinder *c*, as shown in Figs. 1 and 2.

The attaching-string E is preferably of leather, although it may be of any other suitable material, and in order to prevent said string from slipping off the pipe-bowl the leather piece G (better shown in Fig. 3) is provided. This leather piece G is provided with an aperture *p* to receive the pipe-stem *b*, as shown in Fig. 1, and with a recess *r* to receive the corner of the pipe-stem where said stem merges into the bowl, and it is designed to rest snugly against the under side of the pipe-bowl, so as to effectually prevent the leather string, which rests beneath it, from slipping.

In the practice of the invention, when it is desired to attach the pump to a pipe-bowl, the leather piece G is placed in position on the pipe, as shown in Fig. 1, and the gasket or plug D of the pump is introduced into the pipe-bowl, as illustrated in Fig. 2. The leather string E is then passed beneath the pipe-bowl and leather piece G and over the projection *k* of plate C and is drawn as taut as possible. Said string is then wrapped two or three times around the projection *k* and is then drawn taut and clamped between the clamp F and the pump-cylinder, which will effectually prevent it from slipping. In this way it will be seen that the pump may be quickly and easily fastened to a pipe-bowl, and when

so fastened is not liable to be casually disconnected therefrom. It may, however, be readily disconnected by removing the string from the clamp F and unwrapping it from
5 the projection *k* of the plate C.

When not in use, the string E may be wrapped tightly around the pump-cylinder *c*, so as not to materially increase the size of the cleaner.

10 When the cleaner is attached to a pipe, as described, and it is desired to clean the pipe, the pipe-stem is immersed in water or some suitable cleansing solution and the pump-piston is reciprocated, when the water or so-
15 lution will be alternately drawn and forced through the entire stem and bowl of the pipe, and in consequence the same will be quickly cleared of sediment and thoroughly cleaned, which is a desideratum.

20 An important advantage common to the cleaner disclosed in my aforesaid Letters Patent and my present improved cleaner is the fact that they can both be connected to ordi-

nary pipe-bowls of various sizes without disconnecting any of the parts of the same. 25

Having described my invention, what I claim is—

A tobacco-pipe cleaner comprising a pump having a cylinder and a gasket at one end of the cylinder adapted to effect a water-tight
30 connection between the cylinder and a pipe-bowl, and also having a plate provided with the projection *k*, and with a clamp arranged adjacent to the cylinder, and a string con-
35 nected with the plate at a point opposite to the projection thereof and adapted to be passed around a pipe-bowl, wrapped around the projection of the plate and interposed between the clamp and the pump-cylinder,
40 substantially as specified.

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

JOHN JACOB SNYDER.

Witnesses:

THOS. B. BOYD,

GUY HUTCHINSON.