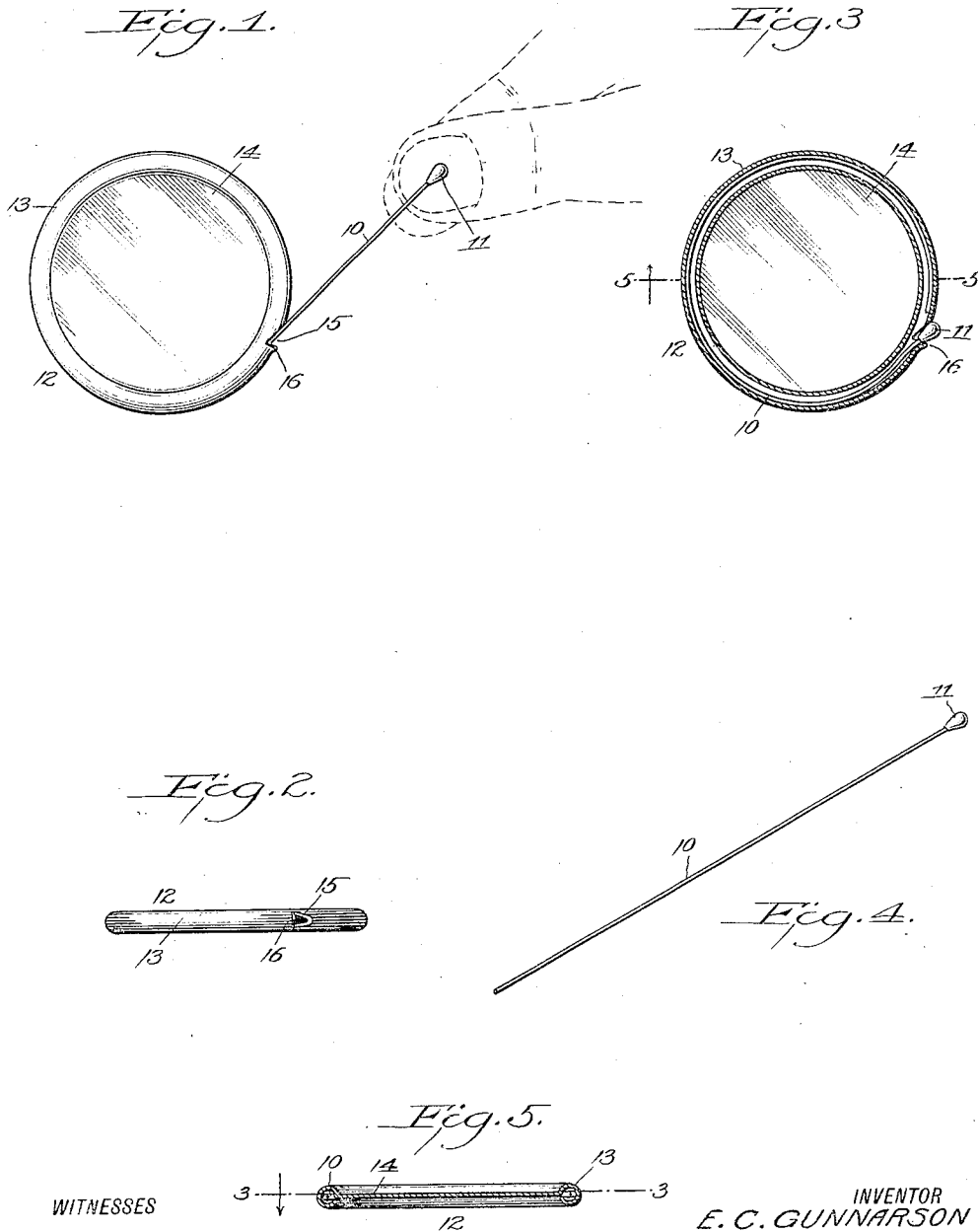


E. C. GUNNARSON.
SMOKING PIPE CLEANER.
APPLICATION FILED OCT. 2, 1919.

1,380,897.

Patented June 7, 1921.



WITNESSES

Oliver H. Holmes
Geo. D. Beeler

INVENTOR
E. C. GUNNARSON

Wm. M. Munn
ATTORNEYS

UNITED STATES PATENT OFFICE.

ENOCH C. GUNNARSON, OF BROOKLYN, NEW YORK.

SMOKING-PIPE CLEANER.

1,380,897.

Specification of Letters Patent.

Patented June 7, 1921.

Application filed October 2, 1919. Serial No. 327,884.

To all whom it may concern:

Be it known that I, ENOCH C. GUNNARSON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Smoking-Pipe Cleaner, of which the following is a full, clear, and exact description.

This invention relates to pipe cleaners or the like and has particular reference to the means of a simple, reliable and compact nature adapted to be carried in one's pocket or other limited space for convenient use when required.

Among the objects of the invention, therefore, is to provide a cleaning member preferably in the nature of a piece of wire, or its equivalent, of a permanent nature and of sufficient length for the purpose. Said wire being adapted to be carried in coiled or curved form or position within a circular holder of suitable small size adapting it to be carried easily in a vest pocket, said wire being provided with a head or enlargement at one end for all manipulation thereof.

With the foregoing and other objects in view the invention consists in the arrangement and combination of parts hereinafter described and claimed, and while the invention is not restricted to the exact details of construction disclosed or suggested herein, still for the purpose of illustrating a practical embodiment thereof reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views, and in which—

Figure 1 is a side elevation of my improvement showing the manner of inserting the cleaner into the holder or withdrawing it therefrom.

Fig. 2 is a plan view.

Fig. 3 is a vertical sectional view of the device in housed position or on the line 3—3 of Fig. 5.

Fig. 4 is a detail view of the cleaner.

Fig. 5 is a horizontal section on the line 5—5 of Fig. 3.

Referring now more specifically to the drawings I show the cleaning member 10 having fixed to one end thereof any suitable enlargement 11 which may be formed by bending a loop in the wire and filling the loop with solder, or its equivalent. The wire may be made of any suitable perma-

nent bendable material having preferably sufficient stiffness for the intended use as a means to clean a pipe stem. Preferably the cleaner is made of metal wire either of resilient wire or otherwise.

The holder 12 includes an annular chamber 13 while the central portion of the holder may consist of a web 14 to carry any printed matter, a label, or other inscriptions, or if desired the holder may be formed to comprise solely an annular chamber with an open center. At any rate one side of the holder is provided with an opening or notch 15 bounded by one wall arranged substantially radial to the holder while the other wall approximates a tangent thereto.

While the holder is held in one hand and the cleaner in the other the point of the cleaner may be introduced into the opening along the tangential side thereof and while the cleaner is forced toward the holder the point or leading end thereof will follow the curved interior walls of the chamber 13 and so form itself automatically into a coil. The chamber is of sufficient capacity to accommodate a cleaner of a length greater or less than the circumference of the holder, the mode of inserting the cleaner into the holder being adaptable as described irrespective of the length of the cleaner. The head 11 of the cleaner in its nested position lies in or over the opening 15 in position to be grasped by the operator's thumb and finger for withdrawal from the holder when required. If the cleaner is made of spring wire it will tend to assume a straight form as shown in Fig. 4, most suitable for operation, without any attention on the part of the operator while withdrawing it from the holder. If, however, it is made of soft wire the operator while withdrawing it from the holder has only to bear outward against the lip 16 bounding the radial wall of the opening 15 so that when the wire is withdrawn from the holder it will have imparted to it force in a proper direction to straighten the wire which otherwise would retain the coiled form resulting from insertion thereof into the holder.

Among the many obvious advantages of my improved cleaner and holder means may be noted the following: First, the cleaner is always available for use by the smoker so that he need not look about for a cleaner, and secondly the cleaning member may always be kept in a clean and sanitary con-

dition by simply wiping the surface thereof with a piece of paper or cloth after it has been used and upon introduction into the holder it will be kept clean.

5 I claim:

In a device of the class set forth, a rigid annular chamber having at one side an opening bounded by two walls arranged at

an angle to each other, one of the walls being approximately radial to the chamber 10 and the other being approximately tangential thereto, said chamber constituting a housing for a flexible cleaner having a head adapted to be stopped by said radial wall.

ENOCH C. GUNNARSON.