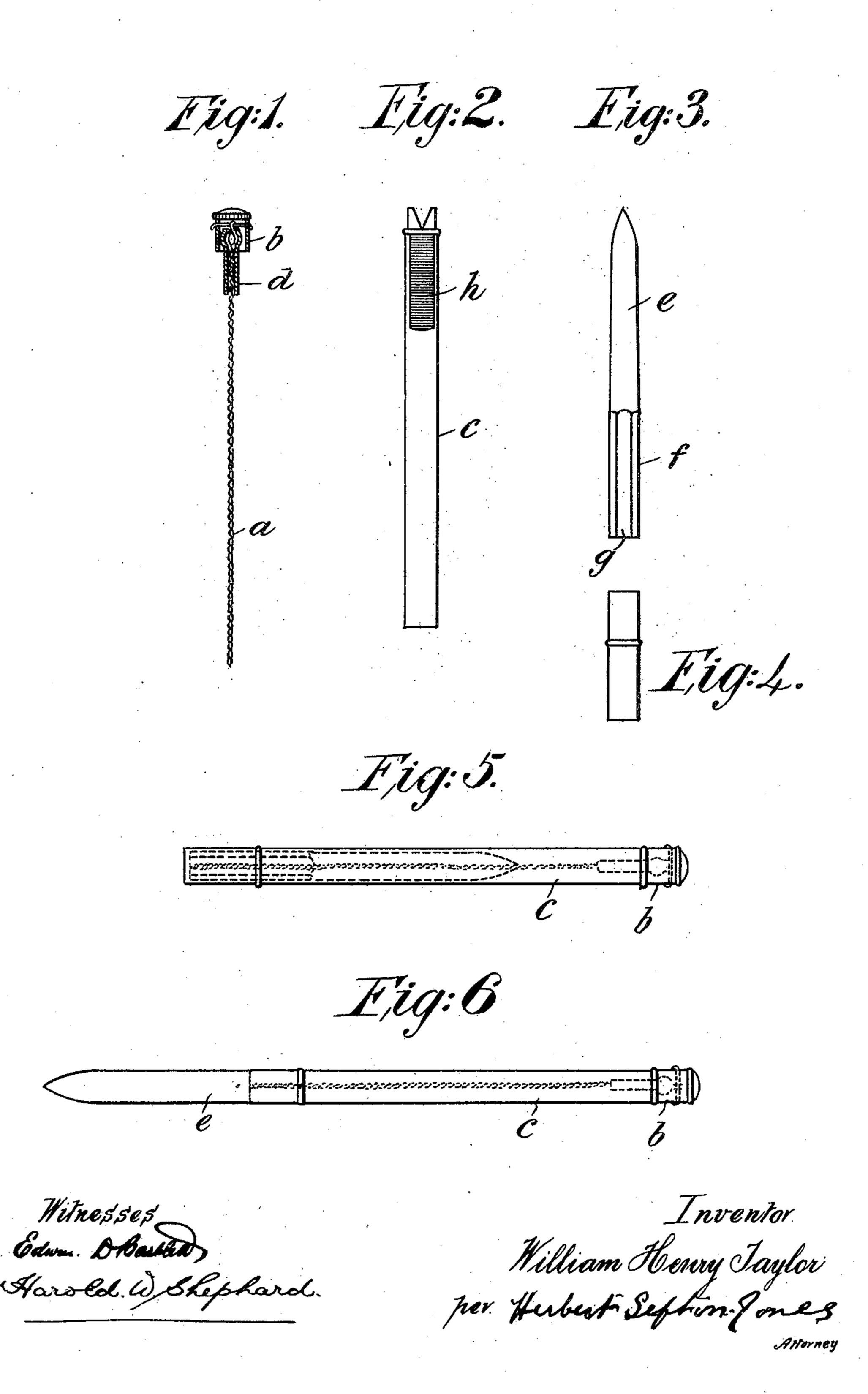
No. 798,229.

PATENTED AUG. 29, 1905.

## W. H. TAYLOR. FOLDING PIPE CLEANER. APPLICATION FILED APR. 6, 1905.



## UNITED STATES PATENT OFFICE.

WILLIAM HENRY TAYLOR, OF NEWPORT, WALES.

## FOLDING PIPE-CLEANER.

No. 798,229.

Specification of Letters Patent.

Fatented Aug. 29, 1905.

Application filed April 6, 1905. Serial No. 254,139.

To all whom it may concern:

Be it known that I, WILLIAM HENRY TAY-LOR. a subject of the King of Great Britain, residing at No. 17 Glass Works Row, New-5 port, in the county of Monmouth, England, have invented a new and useful Improvement in Folding Pipe-Cleaners, of which the following is a specification.

My invention relates to an improved apparatus for cleaning tobacco-pipes, cigar-hold-

ers, cigarette-holders, &c.

It comprises a blade for scraping the bowl of the pipe or wide end of the cigar-holder, &c., and a flexible strip or wire adapted for 15 probing and cleaning the channel of the stem or tube. These instruments are contained in a metal case, which may conveniently take the appearance of a pencil-case, adapted to be carried in the pocket of the user.

In order to more fully set forth my invention and the best method known to me of carrying it into effect, I have illustrated the construction as I now make it in the accompany-

ing drawings, in which—

Figure 1 is a view of the wire probe. Fig. 2 shows the case or container; Fig. 3, the knife or scraper; Fig. 4, the knife-socket, and Fig. 5 is a view of the entire apparatus folded for carrying in the pocket. Fig. 6 30 shows the apparatus with the knife in the operative position.

Referring in detail to these drawings, the probe a is shown as a twisted wire of the requisite length, secured at its upper end to a 35 cap b, adapted to fit the slotted top c of the container. The copper wire a is pivoted within the cap b by a wire passing through the same. In place of a twisted wire, as shown, I may of course employ a stouter sin-40 gle wire, and I may thread or cut or sharpen or otherwise alter the same at the point to enable it more satisfactorily to clean the pipestem. Upon the aforesaid probe a I place a piece of rubber tube d of such diameter that 45 it will conveniently slide thereon. This tube is very convenient for cleaning the wire without soiling the fingers.

The case c is a tube of sufficient length to inclose the probe a and blade e. Its top is 50 slotted, as shown, so as to be slightly compressible by the cap b, and thus retain the latter firmly upon it. A friction-plate h is provided for igniting matches.

blade e, sharp at one edge and also pointed. 55 I prefer, moreover, to grind down the back of the blade a little, so that it can be used as a scraper to scrape the carbon from the sides of the pipe-bowl, thereby preserving the sharp edge of the blade for cutting purposes. 60 The blade is inserted in a handle f, which handle has a groove g on each side of it to enable the end of the probe to pass it when the apparatus is folded up. The requisite length of the folded apparatus is thus short- 65 ened to the minimum requisite.

The knife-socket, Fig. 4, is arranged to fit fairly tight upon the knife-handle f and also to engage to a certain extent within the con-

tainer c.

The parts are assembled for carrying in the pocket, as shown in Fig. 5, the knife being reversed and the blade inserted within the container c. The grooves g permit the end of the probe to fit beside it, as shown in the 75 drawings in dotted lines. The probe is of course inserted at the other end of the container, as shown. Fig. 6 shows the arrangement when the knife or scraper e is required to be used without removal of the probe.

The probe is adapted to clean almost any pattern of pipe, cigar-holder, or the like and

may be of any length required.

The whole apparatus is extremely compact, serviceable, and adapted to be carried in the 85 pocket.

What I claim is—

1. In combination in a pipe-cleaner, a cylindrical cap, a metal probe pivotally secured within said cap, a tubular cleaner on said 90 probe, a spring-mouthed casing adapted to fit within said cap, a two-edged scraper adapted to be reversed within said casing or to be inserted therein in operative position, and an axial groove on the handle of said scraper 95 adapted to contain a portion of the probe.

2. In a combination apparatus for cleaning pipes, the cylindrical cap b, the twisted wire probe a pivotally secured within said cap, the rubber tube d upon said probe, the open- 100 ended casing c having one end slotted to fit within the cap b, the friction-plate h on said casing, the reversible knife e, the handle of said knife f attached to said knife e, the handle f having an axial groove g on each side 105 adapted to contain a portion of the probe a.

3. In combination in a folding pocket ap-The knife or scraper, Fig. 3, comprises a | paratus for cleaning pipes and the like, a

cleaning-probe, a cap adapted to hold the said probe out of contact with the fingers of the user, a casing adapted at one end to fit said cap and a reversible scraper having a handle adapted to fit within the other end of the casing and leave a space for the end of the probe. In testimony whereof I have signed my name

to this specification in the presence of two subscribing witnesses.

## WILLIAM HENRY TAYLOR.

Witnesses:

JOHN THOMAS WHITE, FANNY TAYLOR.