

No. 882,021.

PATENTED MAR. 17, 1908.

J. SCHIGELINSKY.  
BOTTLE CLEANER.

APPLICATION FILED JAN. 26, 1907.

Fig. 1

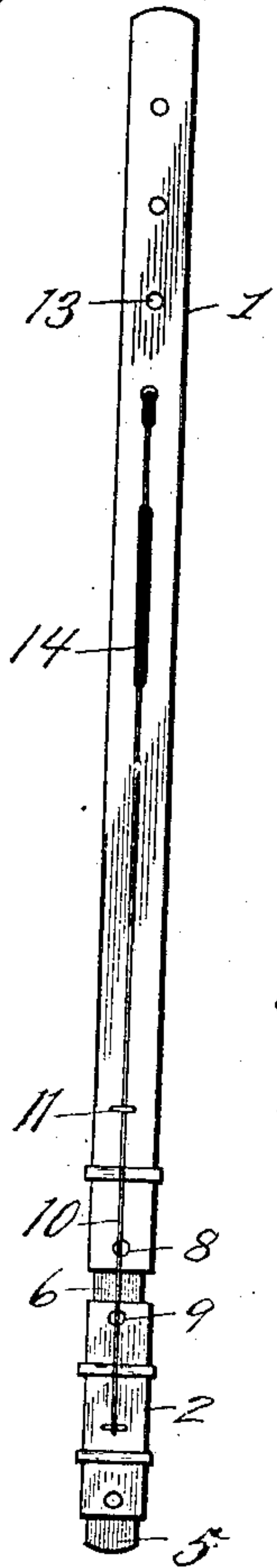


Fig. 3

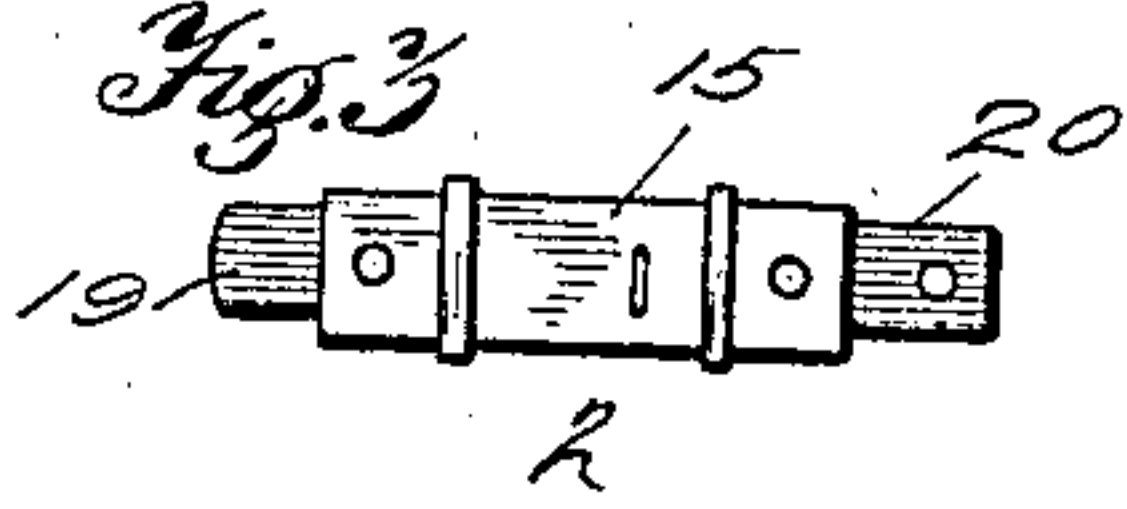


Fig. 4

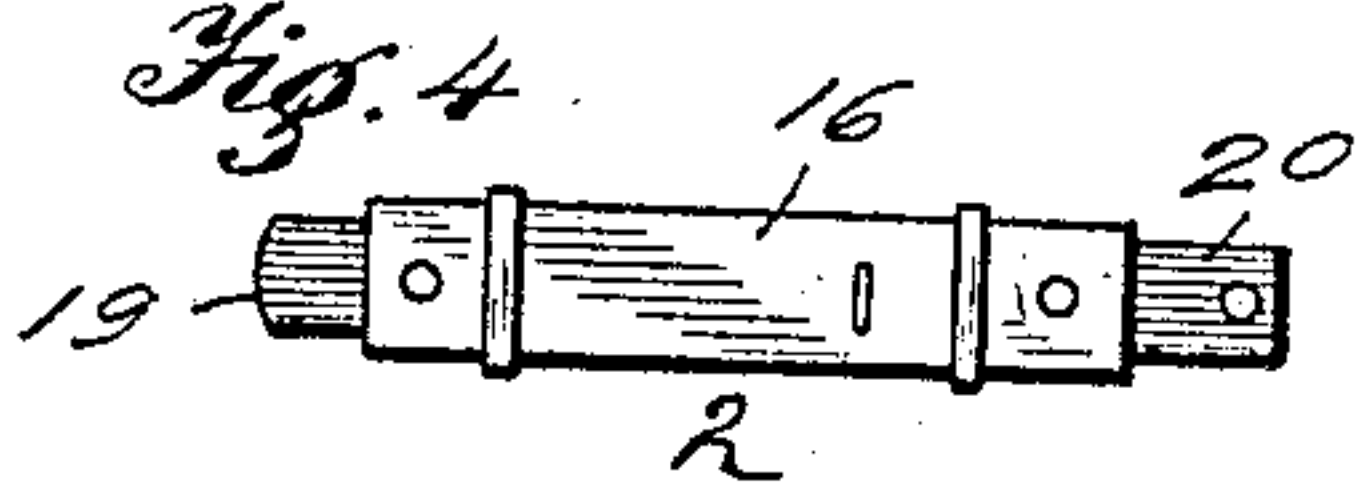


Fig. 5

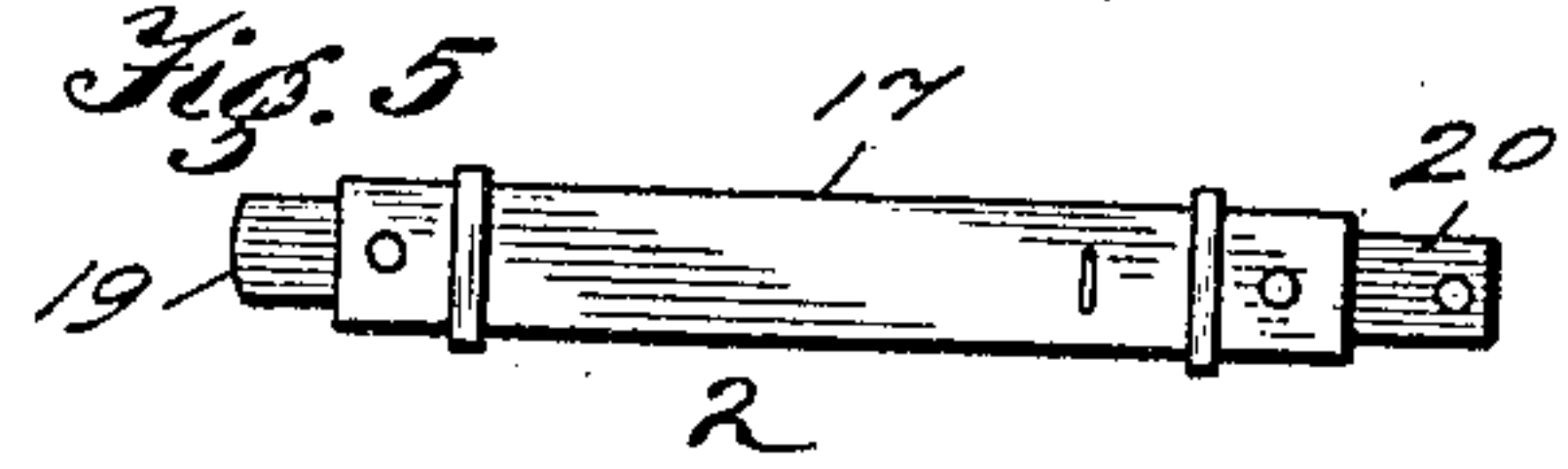


Fig. 6

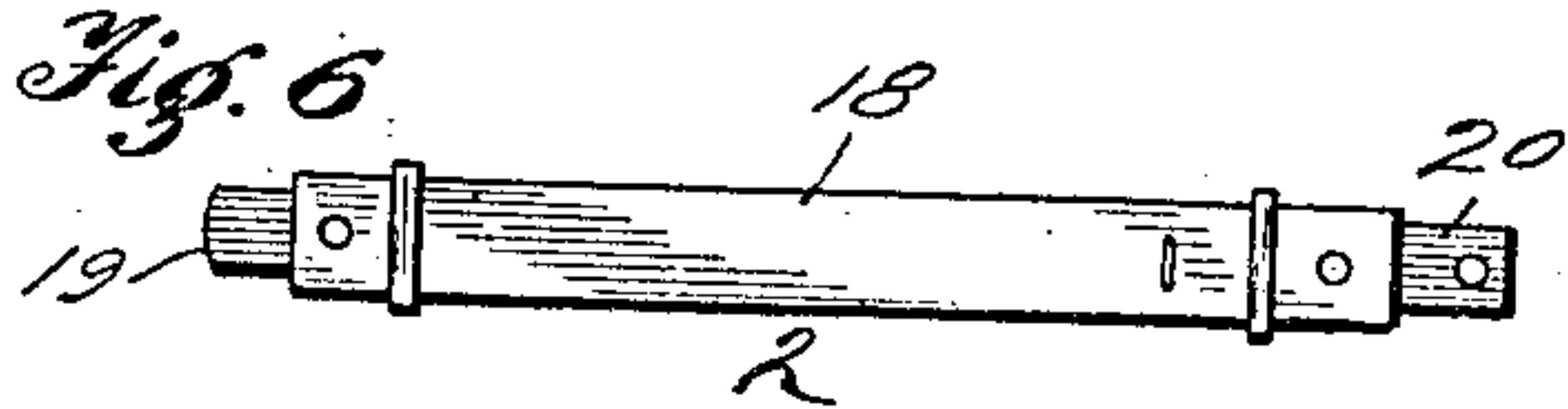
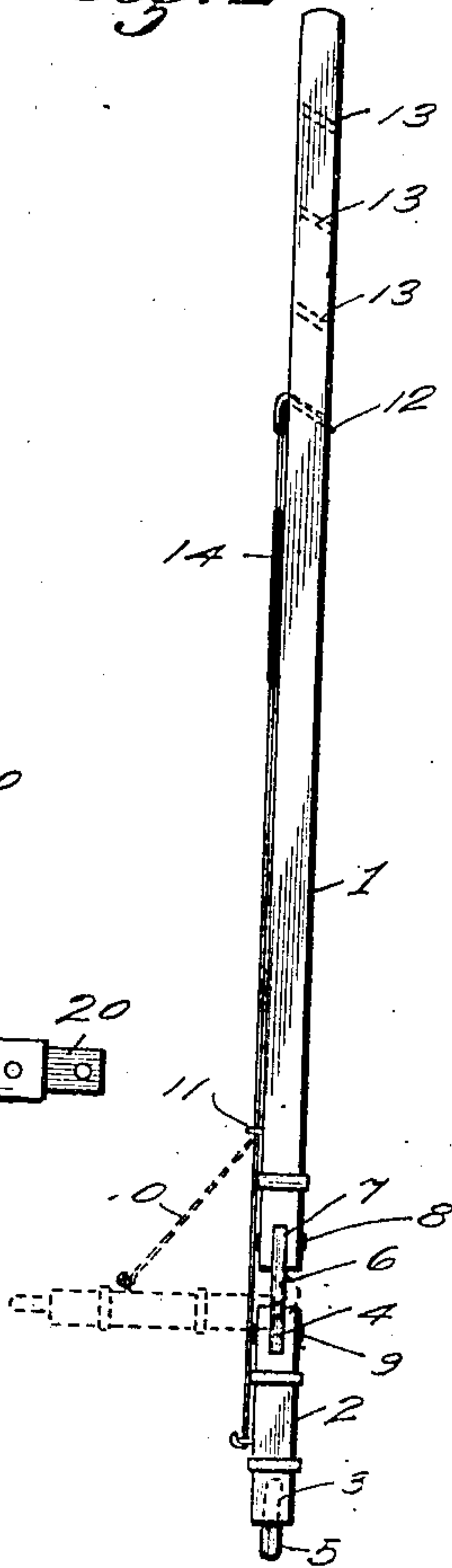


Fig. 2



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN SCHIGELINSKY, OF CLEVELAND, OHIO.

## BOTTLE-CLEANER.

No. 882,021.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed January 26, 1907. Serial No. 354,330.

*To all whom it may concern:*

Be it known that I, JOHN SCHIGELINSKY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Bottle-Cleaners, of which the following is a specification.

The invention relates to an improvement in bottle cleaners in which the operative section is arranged to automatically conform and have a yielding contact with the interior surface of the vessel being cleaned.

The main object of the present invention is the provision of a bottle cleaner comprising a handle section and a cleaning section, the latter being connected with the handle section by a yielding connection, and attached to the handle section by an elastic member tensioned to normally dispose the cleaning section in operative relation to the handle section.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a view in front elevation of a bottle cleaner constructed in accordance with my invention, Fig. 2 is a side elevation of the same, Figs. 3, 4, 5 and 6 are respectively plan views of different sizes of cleaning sections adapted for coöperation with the same handle section.

Referring more particularly to the drawings, it will be seen that my improved bottle cleaner comprises a handle section 1 and a cleaning section 2. The sections 1 and 2 are preferably of identical sectional contour, being rectangular in section and of a transverse area materially less than that of the bottle mouth with which the cleaner is designed to coöperate. The cleaning section 2, which is of less length than the handle section is recessed in its respective ends, as at 3 and 4, for the reception of flexible strips 5 and 6, the former being mounted in the relatively free end of the cleaning section, and the latter in the end adjacent the handle section. The recess 3 receiving the end strip 5 is preferably arranged wholly within the contour of the cleaning section, while the recess 4 preferably opens through the side walls of the cleaning section, all as clearly shown in Fig. 2.

The strip 5 is to be constructed of some yielding, cleaning or rubbing medium, as soft rubber, while the strip 6 is also prefer-

ably of a yielding and resilient character, as rubber or the like. The end of the handle section 1 is also recessed at 7 to receive the end of the strip 6 projecting beyond the cleaning section 2, said strip 6 being connected to both the handle section and cleaning section through the medium of pins 8 and 9, whereby the strip 6, hereinafter termed the hinge strip, is fixedly, yet removably connected to both the handle section and cleaning section.

The cleaning section is connected to the handle section in addition to the hinge connection through the medium of the connector 10 terminally secured to the face wall of the cleaning section adjacent the free end of said section, and passed from said connection through an eye 11 secured to the face wall of the handle section adjacent the pivot pin 8. The upper or free end of the connector 10 is provided with a pin 12 designed to be secured in any one of a series of openings 13 arranged transversely of the handle section and preferably projected at a downward and rearward incline from the face wall of said section. By this means the connector 10 may be adjustably secured to the handle section by simply inserting the pin 12 in one of the openings 13, the inclination of said opening preventing accidental withdrawal of the pin. The connector 10 includes an elastic section 14, preferably a strip of rubber or the like, whereby said connector is so normally tensioned as to dispose the cleaning section at right angles to the plane of the handle section, as shown in dotted lines in Fig. 2.

As the connection of the cleaning sections with the handle section is through the medium of a hinge section 6, I contemplate providing with one handle section a series of cleaning sections 15, 16, 17, and 18 of different lengths, each provided with a cleaning strip 19 and a hinge section or strip 20, so that upon the removal of the pin 8, a cleaning section of the desired length may be readily substituted for one of an ineffect-ive length.

In use the handle section and cleaning section are alined against the tension of the connector 10, and inserted in the bottle or other vessel to be cleaned. After passing the neck or restricted opening of the bottle the tension of the connector 10 operates to dis- pose the cleaning section at right angles to the handle section, so that the cleaning strip



5 may be readily utilized for scraping or otherwise cleaning the interior surface of the bottle.

As the normal tendency of the cleaning section is to bend the hinge strip 6 under tension of the connector 10, it will be obvious that said strip 6 operates as a yielding connection between the handle section and cleaning section, thereby providing for the most effective use of the cleaning strip without liability of subjecting the latter to undue wear.

The tension of the connector relative to the cleaning section may be adjusted through the obvious coöperation of the pin 12 with the particular hole 13, thereby securing the desired tension upon the cleaning section.

In use the cleaner is adapted to readily reach all interior portions of the bottle, the yielding hinge connection insuring a most effective operation of the cleaning strip 5.

Having thus described the invention what is claimed as new, is:—

1. In a bottle cleaner, the combination of a shank-handle, a cleaner arm, a resilient hinge member inserted in recesses in the end of both said handle and said arm, and an extensible cord terminally secured at one end to said arm and provided with means

for adjustably attaching its other end to said handle, substantially as set forth.

2. In a bottle cleaner, the combination of a shank-handle, a cleaner arm, a resilient hinge member inserted in the ends of both said handle and said arm, removable pins for holding said hinge member to said handle and said arm respectively, and an extensible cord terminally secured at one end to said arm and provided with means for adjustably attaching its other end to said handle, substantially as set forth.

3. In a bottle cleaner, the combination with a shank-handle having near its upper end a series of transverse apertures trending diagonally downward, of a cleaner-arm, a removable resilient hinge member between said handle and cleaner-arm, an extensible cord terminally secured at one end to the cleaner-arm, and a pin attached to the other end of said cord adapted for insertion in the said handle apertures, substantially as set forth.

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

JOHN SCHIGELINSKY.

Witnesses:

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GLENN E. GRISWOLD.