S. CARLSON.

CLEANER FOR BURNER TIPS.

(Application filed Feb. 18, 1902.)

(No Model.)

Witnesses Ottomung. Ken Horse Il Elhone By Richardsolo Attorneys

United States Patent Office.

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CLEANER FOR BURNER-TIPS.

SPECIFICATION forming part of Letters Patent No. 709,077, dated September 16, 1902.

Application filed February 18, 1902. Serial No. 94,675. (No model.)

To all whom it may concern:

Be it known that I, SVEN CARLSON, a subject of the King of Sweden and Norway, and a resident of Stockholm, Sweden, have invented ed certain new and useful Improvements in Cleaners for Burner-Tips, of which the following is a specification.

The invention has for its object a device for convenient cleaning of the discharge-orifice in the burner of lamps and other illuminating apparatus in which the light is produced by means of vaporized petroleum or other hydrocarbon.

This device is illustrated in three different positions in Figures 1 to 3 of the accompanying drawings, which show the device in side elevation. Fig. 4 is a perspective view showing the detail structure of the upper part of the device.

at its upper end partly a head h, on which the cleaning - needle i is fixed, partly a forked guide k. This arm is jointed at its lower end to another arm x, which is movable in the vertical plane about a pin f, supported by some stationary part of the lamp or illuminating apparatus, the arm b, moreover, being pressed by a spring c or by other suitable means against

a lug y, located in front of it on the arm x.

The arm x is also acted upon by the said or some other spring, so as to hold the arm b, together with the cleaning-needle, withdrawn from the nozzle in the position illustrated in Fig. 1. By pulling on a string connected to

the arm x (at z) this arm x will be brought to swing into the position illustrated in Fig. 2 and to move the arm b in the direction of the nozzle a, and the guide k, striking the latter, will prevent further turning of the arm b. At a continued pulling on the string mentioned, 40 therefore, the arm b, taking part in the further movement of the arm x, will be lowered against the resistance of the spring c and will assume the position indicated in Fig. 3 where the cleaning-needle enters the orifice of the 45 nozzle. When the pulling on the string ceases, the arms b x, under the influence of the spring c, will return to the original position in Fig. 1.

Having now particularly described and as- 50 certained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

An improved cleaning device comprising a needle-carrying arm, and a rocking arm to 55 which the said needle-carrying arm is pivoted, said rocking arm having movement to carry the needle-carrying arm laterally to the burner and to move the needle-carrying arm longitudinally to thrust the needle into the burner- 60 orifice, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

SVEN CARLSON.

Witnesses:

H. TCLANDER,

T. RISBERG.