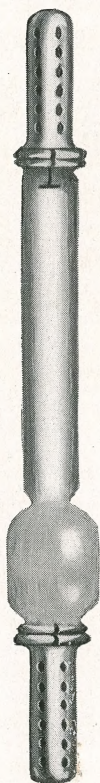


UVIARC LAMPS

IN THE

LABORATORY



COOPER HEWITT ELECTRIC Co.

HOBOKEN, NEW JERSEY

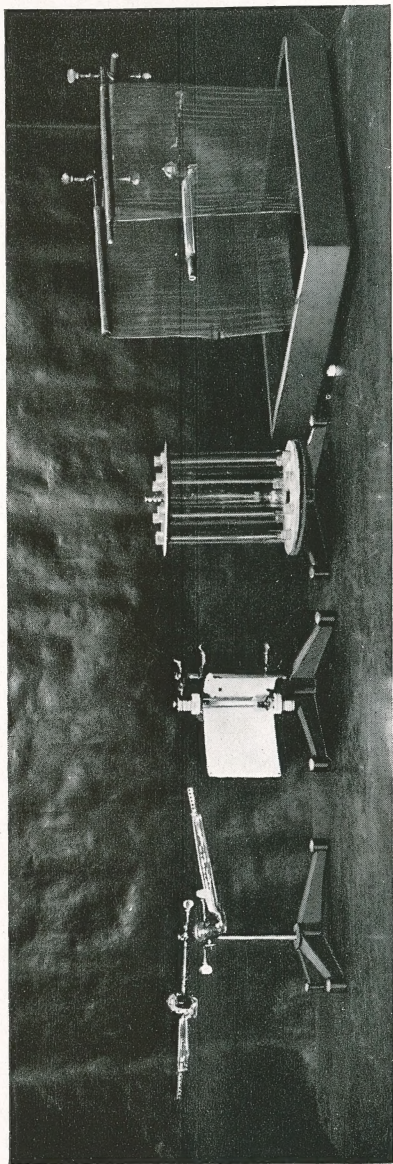


Fig. 1. Illustrating a method of supporting horizontal Uviarcs in laboratory clamps, of using a vertical Uviarc with a cylindrical parabolic reflector, of distributing quartz test tubes symmetrically around a vertical Uviarc, of raying liquids in thin agitated films by flowing them over screens.

Uviarc Lamps in the Laboratory

THE UVIARC is made of fused Brazil rock crystal, which is the best quality of clear crystalline quartz, and is especially prepared for high transmission of the ultra-violet. In operation there is an arc from a mercury cathode to a tungsten anode. At a mercury vapor pressure of one atmosphere this arc is concentrated into a narrow cord in the center of the arc tube and becomes the most efficient source of high frequency ultra-violet radiation available.

The Uviarcs are made in standard models as follows:

- 110 V.—450 watt, 3" arc, horizontal
- 110 V.—450 watt, 3" arc, vertical
- 220 V.—900 watt, 6" arc, horizontal
- 220 V.—900 watt, 6" arc, vertical.

The uses to which the Uviarcs may be put in laboratory experimentation are so varied that no one apparatus or method can be specified. For general use, however, a simple but effective Laboratory Outfit is made, Fig. 2, and the lamp holders will take any type or size of Uviarc. A removable hood is provided for this lamp. The lamp and hood is universally adjustable in all planes and adaptable to a great variety of laboratory and factory uses. A light-tight filter holder carries a Corning G586AW filter and is of value in the study of fluorescence.

In the auxiliary device provision is made for operation upon direct or alternating current, the direct current auxiliary being shown in Fig. 2. A rectifier-auxiliary for alternating current, 110 or 220 volt, operation is also used with the Laboratory Outfit in which case the 220 volt size of Uviarc is usually used.

To operate the Uviarc out of the Laboratory Outfit holder, as in Fig. 1, it is only necessary to extend the lead wires from this outfit to the lamp, making sure that the polarity is correct.

Where necessary either horizontal or vertical Uviarcs may be operated as much as 45° from their normal operating position.

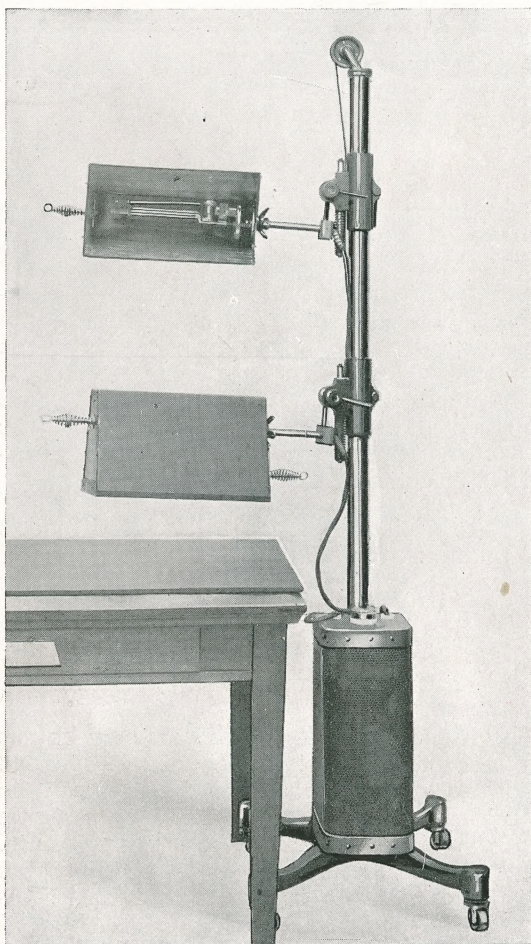


Fig. 2. Uviarc Laboratory Outfit. Composite showing two positions of hood.

Cooper Hewitt Products

COOPER HEWITT ELECTRIC LAMPS

For industrial illumination.
For photography.

UVIARC (*Ultra Violet Arc*) LAMPS

Uviarc Test Cabinets for color fastness.
Labarc for physical laboratory work.
Uviarc Laboratory Outfit for experimental work.

COOPER HEWITT ELECTRIC CO.

HOBOKEN, NEW JERSEY

Boston: 161 Summer St.
Chicago: Old Colony Bldg.
Cincinnati: First National Bank Bldg.
Cleveland: Engineers Bldg.
Detroit: Ford Bldg.
Hoboken: 95 River St.

Los Angeles: Keese Engineering Corp.
Milwaukee: Security Bldg.
Philadelphia: Drexel Bldg.
Pittsburgh: Westinghouse Bldg.
St. Louis: Title Guaranty Bldg.
Syracuse: University Bldg.