

In several respects this fraction shows the behavior of an aliphatic hydrocarbon.

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### MONARDELLA OIL.

BY EMERSON R. MILLER.

Several years ago while spending a summer in California the writer observed that a species of *Monardella* grew abundantly in several localities, particularly in the Yosemite and in the Lake Tahoe region.

According to the descriptions given in Hall's "A Yosemite Flora" the species in question is probably *Monardella lanceolata* Gray, commonly known as Western Pennyroyal. The plant is of special interest on account of its odor which suggests the presence of pulegone.

A small quantity of this plant was collected and, in the air-dried condition, was steam distilled at Auburn, Alabama. The yield of oil was practically one per cent.

The physical constants of the oil were as follows:

$$d_{15}^{25}, 0.9392; n_{D18}, 1.4908; \alpha_D, +17.4^\circ$$

For identification of pulegone a semicarbazone was prepared from the oil, m. p. 167°. The oil also yielded an oxime (isopulegone oxime) m. p. 118-120°.

A comparison of the physical constants of the oil with those of pulegone would seem to show that the oil consists principally of pulegone.

	Oil of <i>Monardella</i> .		Pulegone.
$d_{15}^{25}$	0.9392	$d_{15}$	0.939
$n_{D18}$	1.4908	$n_{D20}$	1.488
$\alpha_D$	+17.4°	$\alpha_D$	+20° to 23°

The quantity of oil obtained was not sufficient for a further investigation.

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### USE OF THE MONESS AND GIESY VISCOSIMETER TO CHECK THE SAYBOLT UNIVERSAL VISCOSIMETER.

BY W. E. HONSINGER.

We desired to check the results obtained with the Saybolt Universal Viscosimeter at 100° F. on liquid petrolatum by using the instrument designed by Moness and Giesy and described in THIS JOURNAL. (1)

The viscosimeter was made and set up as described in that article. The rate of flow of a 37% by weight alcohol-water mixture of known viscosity (2) was measured with results ranging between 73 and 74 seconds. The radius of the capillary was found by making the proper substitutions in Bingham's equation (3) and solving for R. This result was checked by weighing the mercury thread and calculating the radius from this weight, the sp. gr. of mercury and the length of the capillary tube.

Three samples of liquid petrolatum from different lots were taken and their