

follows :—The oil-cup is to be removed from the water-bath, and the temperature of the water in the water-bath is to be reduced to 95° Fahrenheit by pouring cold water into the funnel (the hot water escaping by the overflow-pipe). The air-chamber is then to be filled to a depth of 1½ inches with water at a temperature of about 95° Fahrenheit, the oil-cup is to be replaced in the water-bath, and the spirit-lamp, attached to the water-bath, is to be lighted and placed underneath. The test-flame is then to be again applied, from 96° Fahrenheit, at every degree rise of temperature as indicated by the thermometer in the oil-cup until a flash takes place, or until a temperature of 150° Fahrenheit has been reached. If during this operation the test-flame appears to diminish in size, the lamp is to be replenished in the manner prescribed (at 2) without interrupting the test.

If a flash occurs at any temperature between 76° and 150° Fahrenheit, the temperature at which it occurs subject to correction for atmospheric pressure, is the flashing point of the sample.

In repeating a test, a fresh sample of oil must always be used, the tested sample being thrown away, and the cup must be wiped dry from any adhering oil, and cooled, as already described, before receiving the fresh sample.

5. CORRECTION FOR ATMOSPHERIC PRESSURE.—As the flashing point of an oil is influenced by changes in atmospheric pressure to an average extent of 1.6 Fahrenheit for every inch of barometer, a correction of the observed flashing point may become necessary. The true height of the barometer must, therefore, be determined at the time of making the test for the flashing point. To facilitate the correction of a flashing point for pressure a table is appended, giving the flashing points of oils ranging from 65° to 80° Fahrenheit, under pressures ranging from 27 to 31 inches of mercury.

The table is used in the following manner :—

EXAMPLE.—An oil has given a flashing point of 71°, the barometer being at 28.6; take the nearest number to 71° in the vertical column headed 28.6. This number is 70.8. Substitute for this the number in the same horizontal line in the column headed 30 (the normal height of barometer). The Substituted number, *i.e.* the true flashing point of the oil, is 73°.

TABLE for correction of FLASHING POINTS indicated by the Test for Variations in Barometric Pressure on either side of Thirty Inches.

BAROMETER IN INCHES.																				
27	27.2	27.4	27.6	27.8	28	28.2	28.4	28.6	28.8	29	29.2	29.4	29.6	29.8	30	30.2	30.4	30.6	30.8	31
FLASHING POINT IN DEGREES FAHRENHEIT.																				
60.2	60.5	60.8	61.2	61.5	61.8	62.1	62.4	62.8	63.1	63.4	63.7	64	64.4	64.7	65	65.3	65.6	66	66.3	66.6
61.2	61.5	61.8	62.2	62.5	62.8	63.1	63.4	63.8	64.1	64.4	64.7	65	65.4	65.7	66	66.3	66.6	67	67.3	67.6
62.2	62.5	62.8	63.2	63.5	63.8	64.1	64.4	64.8	65.1	65.4	65.7	66	66.4	66.7	67	67.3	67.6	68	68.3	68.6
63.2	63.5	63.8	64.2	64.5	64.8	65.1	65.4	65.8	66.1	66.4	66.7	67	67.4	67.7	68	68.3	68.6	69	69.3	69.6
64.2	64.5	64.8	65.2	65.5	65.8	66.1	66.4	66.8	67.1	67.4	67.7	68	68.4	68.7	69	69.3	69.6	70	70.3	70.6
65.2	65.5	65.8	66.2	66.5	66.8	67.1	67.4	67.8	68.1	68.4	68.7	69	69.4	69.7	70	70.3	70.6	71	71.3	71.6
66.2	66.5	66.8	67.2	67.5	67.8	68.1	68.4	68.8	69.1	69.4	69.7	70	70.4	70.7	71	71.3	71.6	72	72.3	72.6
67.2	67.5	67.8	68.2	68.5	68.8	69.1	69.4	69.8	70.1	70.4	70.7	71	71.4	71.7	72	72.3	72.6	73	73.3	73.6
68.2	68.5	68.8	69.2	69.5	69.8	70.1	70.4	70.8	71.1	71.4	71.7	72	72.4	72.7	73	73.3	73.6	74	74.3	74.6
69.2	69.5	69.8	70.2	70.5	70.8	71.1	71.4	71.8	72.1	72.4	72.7	73	73.4	73.7	74	74.3	74.6	75	75.3	75.6
70.2	70.5	70.8	71.2	71.5	71.8	72.1	72.4	72.8	73.1	73.4	73.7	74	74.4	74.7	75	75.3	75.6	76	76.3	76.6
71.2	71.5	71.8	72.2	72.5	72.8	73.1	73.4	73.8	74.1	74.4	74.7	75	75.4	75.7	76	76.3	76.6	77	77.3	77.6
72.2	72.5	72.8	73.2	73.5	73.8	74.1	74.4	74.8	75.1	75.4	75.7	76	76.4	76.7	77	77.3	77.6	78	78.3	78.6
73.2	73.5	73.8	74.2	74.5	74.8	75.1	75.4	75.8	76.1	76.4	76.7	77	77.4	77.7	78	78.3	78.6	79	79.3	79.6
74.2	74.5	74.8	75.2	75.5	75.8	76.1	76.4	76.8	77.1	77.4	77.7	78	78.4	78.7	79	79.3	79.6	80	80.3	80.6
75.2	75.5	75.8	76.2	76.5	76.8	77.1	77.4	77.8	78.1	78.4	78.7	79	79.4	79.7	80	80.3	80.6	81	81.3	81.6

A. M. G. FLETCHER,
Clerk of Councils.

COUNCIL CHAMBER,
15th March, 1906.

APPOINTMENTS, &c.

COLONIAL SECRETARY'S DEPARTMENT.

No. 216.—With reference to Government Notification No. 3 of the 5th January, 1906, it is notified that the following name has been added to the List of Authorized Architects under the Public Health and Buildings Ordinance, 1903 :—

THOMAS WILLIAM CLARKE.

T. SERCOMBE SMITH,
Colonial Secretary.

16th March, 1906.