THE PETROLEUM ACT, 1886.

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ACT No. XII OF 1886.

PASSED BY THE GOVERNOR GENERAL OF INDIA IN COUNCIL.

(*Received the assent of the Governor General on the 12th March, 1886.*)

An Act to regulate the importation, possession and transport of Petroleum and other fluids of a like nature.

WHEREAS it is expedient to regulate the importation, possession and transport of petroleum and other fluids of a like nature; It is hereby enacted as follows:—

Preliminary.

Short title, commencement and local extent.

1. (*1*) This Act may be called the Petroleum Act, 1886; and

(*2*) It shall come into force on such day as the Governor General in Council, by notification in the Gazette of India, appoints.

(*3*) The provisions of this Act relating to dangerous petroleum, and the importation of petroleum, extend to the whole of British India. The rest of this Act extends only to such local areas as the Local Government may from time to time, by notification in the official Gazette, direct.

(*4*) Any power conferred by this Act to make rules or issue orders may be exercised at any time after the passing of this Act; but a rule or order so made or issued shall not take effect until the Act comes into force.

Repeal.

2. (*1*) On and from the day on which this Act comes into force, the Petroleum Act, 1881, shall be repealed:

VIII of 1881.

(*2*) But

(*2*) But all notifications issued, rules made, licenses granted, powers conferred and certificates given under that Act shall, so far as may be, be deemed to have been issued, made, granted, conferred and given under this Act.

Definitions.

3. In this Act, unless there is something repugnant in the subject or context,—

(*1*) "petroleum" includes also the liquids commonly known by the names of rock oil, Rangoon oil, Burma oil, kerosine, paraffine oil, mineral oil, petroline, gasoline, benzol, benzoline, benzine, and any inflammable liquid which is made from petroleum, coal, schist, shale, peat or any other bituminous substance, or from any products of petroleum; but it does not include any oil ordinarily used for lubricating purposes and having its flashing point at or above two hundred degrees of Fahrenheit's thermometer:

(*2*) "dangerous petroleum" means petroleum having its flashing point below seventy-six degrees of Fahrenheit's thermometer: Provided that, when all or any of the petroleum on board a ship, or in the possession of a dealer, is declared by the master of the ship or the consignee of the cargo, or by the dealer, as the case may be, to be of one uniform quality, the petroleum shall not be deemed to be dangerous if the samples selected from the petroleum have their flashing points, on an average, at or above seventy-three degrees of Fahrenheit's thermometer, and if no one of those samples has its flashing point below seventy degrees of that thermometer:

(*3*) "import" means to bring into British India by sea or land,

and "importation" means the bringing into British India as aforesaid:

(*4*) "transport" means to remove from one place to another within British India: and

(*5*) "ship" includes anything made for the conveyance by water of human beings or property.

4. (*1*) The

Matters supplemental to the definitions.

4. (*1*) The flashing point of petroleum means the lowest temperature at which the petroleum yields a vapour which will furnish a momentary flash or flame when tested in accordance with the directions in the schedule to this Act with an apparatus which has been stamped and certified as provided by this Act within a period of five years immediately preceding the date on which the apparatus is used for the testing, and after the corrections (if any) which the certificate declares are to be applied to the results of the testing have been made.

(*2*) Notwithstanding anything in the definitions of "import", "importation" and "transport", the Local Government, with the previous sanction of the Governor General in Council, may from time to time, by notification in the official Gazette, declare—

(*a*) that petroleum imported into its territories from any part of British India, by sea or across intervening territory not being part of British India, shall, for all or any of the purposes of this Act, be deemed to be transported; and

(*b*) that petroleum transported into its territories from any place in British India shall, for all or any of those purposes, be deemed to be imported;

and thereupon the provisions of this Act, and of the rules made under this Act, with respect to transport and import, respectively, shall apply to petroleum so imported or transported.

Dangerous Petroleum.

Dangerous petroleum in quantities exceeding 40 gallons.

5. (*1*) No quantity of dangerous petroleum exceeding forty gallons shall be imported or transported, or kept by any one person or on the same premises, except under, and in accordance with the conditions of, a license from the Local Government granted as next hereinafter provided.

(*2*) Every

(*2*) Every application for such a license shall be in writing, and shall declare—

(*a*) the quantity of the petroleum which it is desired to import, transport or possess, as the case may be;

(*b*) the purpose for which the applicant believes that the petroleum will be used; and

(*c*) that petroleum other than dangerous petroleum cannot be used for that purpose.

(*3*) If the Local Government sees reason to believe that the petroleum will be used for that purpose, and that no petroleum other than dangerous petroleum can be used for the purpose, it may grant the license for the importation, transport or possession (as the case may be) of the petroleum, absolutely or subject to such conditions as it thinks fit.

Dangerous petroleum in quantities not exceeding forty gallons.

6. No quantity of dangerous petroleum equal to or less than forty gallons shall be kept or transported without a license:

Provided that nothing in this section shall apply in any case when the quantity of the petroleum kept by any one person or on the same premises, or transported, does not exceed three gallons, and the petroleum is placed in separate glass, stoneware or metal vessels, each of which contains not more than a pint and is securely stopped.

Vessels containing dangerous petroleum to be labelled.

7. Dangerous petroleum—

(*a*) which is kept at any place after seven days from the date on which it is imported, or

(*b*) which is transported, or

(*c*) which is sold or exposed for sale,

shall be contained in vessels having attached thereto a label in conspicuous characters stating the description of the petroleum, with the addition of the words "highly inflammable" and with the addition—

(*d*) in the case of a vessel kept, of the name and address of the consignee or owner;

(*e*) in

(*e*) in the case of a vessel transported, of the name and address of the sender; and

(*f*) in the case of a vessel sold or exposed for sale, of the name and address of the vendor.

Petroleum generally.

Power for Local Government to make rules as to importation and refining of petroleum.

8. (*1*) The Local Government, with the previous sanction of the Governor General in Council, may make rules consistent with this Act to regulate the importation of petroleum, and in particular—

(*a*) to determine the ports at which only petroleum may be imported;

(*b*) to ascertain the quantity and description of any petroleum on board any ship;

(*c*) to determine the places at which, and the conditions on and subject to which, petroleum may be discharged into boats, landed, transhipped or stored;

(*d*) to provide for the selection by an officer appointed by the Local Government in this behalf, and for the delivery to him, either after or before petroleum has been landed, of samples of all petroleum landed or intended to be landed.

(*e*) to provide, in the case of each consignment which is stated to be of one uniform quality, for the number of samples to be selected, and for the averaging of the results of the testing of those samples;

(*f*) to provide, where the results of the testing of the samples raise a doubt as to the uniformity of the quality of the petroleum in any such consignment, for the division of the consignment into lots, and for the selection and testing of samples of each lot, and for the treatment of the lot in accordance with the results of the testing of those samples;

(*g*) to

(*g*) to fix fees for the sampling and testing of petroleum ; and

(*h*) to fix fees for the storage of petroleum unless a body of port commissioners or other like body is empowered in that behalf.

(*2*) The Local Government, with the previous sanction of the Governor General in Council, may, with respect to any petroleum produced within its territories, make rules—

(*a*) to define the limits of the places where the petroleum is to be refined ;

(*b*) to provide for the testing of the petroleum at or near those places ; and

(*c*) to prevent the removal from those limits, otherwise than under the provisions of this Act applicable to dangerous petroleum, of petroleum which has not satisfied the tests prescribed by the rules.

Procedure after petroleum has been discharged or landed.

9. (*1*) Petroleum discharged into boats or landed in accordance with rules made under section 8, sub-section (*1*), shall not be removed from the boats or places in or at which it is stored until the samples selected therefrom in accordance with those rules have been tested by an officer appointed by the Local Government in this behalf in the manner described in the schedule to this Act, with an apparatus which has been stamped and certified as provided by this Act, and until the officer has given a certificate that the petroleum is not dangerous petroleum.

(*2*) If the officer after testing the samples refuses to give the certificate in respect of any petroleum, the Local Government may permit the consignee, within a time to be fixed by the Local Government in this behalf,—

(*a*) to rectify the petroleum,

(*b*) to apply for a license to import the petroleum as dangerous petroleum, or

(*c*) to re-export the petroleum.

(*3*) If

(*3*) If the consignee does not within the time fixed under sub-section (*2*) avail himself of the permission granted under that sub-section, the petroleum may be disposed of as the Local Government directs.

(*4*) Notwithstanding anything in the foregoing portions of this section, the Local Government in its discretion may, where the officer has refused the certificate, direct that the petroleum be re-tested by another officer appointed by it in this behalf, and may, if that officer advises that the petroleum is not dangerous petroleum, authorise its removal from the boats or places in or at which it is stored.

Possession and transport of petroleum.

10. No quantity of petroleum exceeding five hundred gallons shall be kept by any one person or on the same premises or shall be transported except under, and in accordance with the conditions of, a license granted under this Act.

Power to make rules as to possession and transport.

11. (*1*) The Local Government, with the previous sanction of the Governor General in Council, may make rules consistent with this Act as to the granting of licenses to possess or transport petroleum in cases where such licenses are by law required.

(*2*) The rules may provide for the following among other matters, that is to say :—

in the case of licenses to possess petroleum—

(*a*) the nature and situation of the premises for which they may be granted, and

(*b*) the inspection of the premises and the testing of petroleum found thereon ;

in the case of licenses to transport petroleum—

(*c*) the manner in which the petroleum is to be packed, the mode and time of transit, and the route by which it is to be taken, and

(*d*) the stoppage and inspection of it during transit ;

in the case of both such licenses—

(*e*) the authority by which the license may be granted ;

(*f*) the

(*f*) the fee to be charged for it;

(*g*) the quantity of petroleum it is to cover;

(*h*) the conditions which may be inserted in it;

(*i*) the time during which it is to continue in force; and

(*j*) the renewal of the license.

(*3*) The Governor General in Council may make rules consistent with this Act as to the granting of licenses to transport petroleum from any part of British India to any other part of British India in cases where such licenses are by law required; and those rules may provide, among other matters, for those mentioned in sub-section (*2*) as matters for which rules made by a Local Government with respect to licenses to transport petroleum may provide.

Power to inspect and require dealer to sell samples.

12. Any officer specially authorised by name or by virtue of his office in this behalf by the Local Government may require any dealer in petroleum to show him any place and any of the vessels in which any petroleum in his possession is stored or contained, to give him such assistance as he may require for examining the same, and to deliver to him samples of the petroleum on payment of the value of the samples.

Notice to be given when officer proposes to test samples.

13. When any such officer has, in exercise of the powers conferred by section 12, or by purchase, obtained a sample of petroleum in the possession of a dealer, he may give a notice in writing to the dealer informing him that he is about to test the sample or cause it to be tested with the apparatus and in the manner described in the schedule to this Act, at a time and place to be fixed in the notice, and that the dealer or his agent may be present at the testing.

Certificate as to result of testing.

14. On any such testing, if it appears to the officer or other person so testing that the petroleum from which the sample has been taken is or is not dangerous petroleum, the officer or other person may certify the fact; and the certificate so given shall be receivable as evidence in any proceedings which may be taken

taken under this Act against the dealer in whose possession the petroleum was found, and shall, until the contrary is proved, be evidence of the fact stated therein; and a certified copy of the certificate shall be given free of charge to the dealer at his request.

Penalties.

Penalty for illegal importation, possession or transport of petroleum.

15. Any person who, in contravention of this Act or of any rules made under this Act, imports, possesses or transports any petroleum, and any person who otherwise contravenes any such rules or any condition contained in a license granted under this Act, shall be punished with imprisonment for a term which may extend to one month, or with fine which may extend to five hundred rupees, or with both.

Penalty for keeping, transporting, selling or exposing for sale petroleum in contravention of section 7.

16. Any person keeping, transporting, selling or exposing for sale petroleum in vessels not labelled as prescribed by section 7, shall be punished with fine which may extend to five hundred rupees.

Penalty for refusing to to comply with section 12.

17. Any dealer in petroleum who refuses or neglects to show to any officer authorised under section 12 any place or any of the vessels in which petroleum in his possession is stored or contained, or to give him such assistance as he may require for examining the same, or to give him samples of the petroleum on payment of the value of the samples, shall be punished with fine which may extend to two hundred rupees.

Confiscation of petroleum.

18. In any case in which an offence under section 15 or section 16 has been committed, the convicting Magistrate may direct that—

(*a*) the petroleum in respect of which the offence has been committed, or

(*b*) where the offender is importing or transporting, or is in possession of, any petroleum exceeding the quantity (if any) which he is permitted

permitted to import, transport or possess, as the case may be, the whole of the petroleum which he is importing or transporting or is in possession of,

shall, together with the tins or other vessels in which it is contained, be confiscated.

Jurisdiction.

19. The criminal jurisdiction under this Act shall, in the towns of Calcutta, Madras and Bombay, be exercised by a Presidency Magistrate, and elsewhere by a Magistrate of the first class, or (where specially empowered by the Local Government to try cases under this Act) a Magistrate of the second class.

Test-apparatus.

Model test-apparatus.

20. A model of the apparatus for testing petroleum under this Act, constructed in accordance with the description contained in the schedule to this Act, shall be deposited in the office of the Chemical Examiner to Government, Calcutta, and be marked with the words "Model test-apparatus."

Verification of test-apparatus.

21. (*1*) The Chemical Examiner shall, on payment of such fee (if any) as the Governor General in Council may, from time to time, by notification in the Gazette of India, prescribe, compare with the said model test-apparatus and verify every apparatus for testing petroleum which is submitted to him for the purpose.

(*2*) If any apparatus for testing petroleum, when compared and verified as provided by sub-section (*1*), is found correct, or correct subject to certain corrections to be applied to the results of the tests, the Chemical Examiner shall stamp the same with a special number, and with the date of the verification, and shall further give a certificate in writing under his hand, in a form to be prescribed by the Governor General in Council, to the effect that on the date aforesaid the apparatus was compared and verified by him and found to be correct, or correct subject to certain specified corrections to be applied to the results of the tests.

(*3*) A

(*3*) A certificate granted under this section shall, until the contrary is proved, be conclusive proof of the matters stated therein.

(*4*) The Chemical Examiner shall keep a register, in a form to be prescribed by the Governor General in Council, of the certificates granted under this section.

(*5*) Subject to the payment of such fees as the Governor General in Council may, by notification in the Gazette of India, prescribe in this behalf, the said model test-apparatus shall be at all reasonable times open to inspection by any person desiring to inspect it.

Miscellaneous.

Power to Local Government to exempt petroleum from operation of this Act.

22. The Local Government may, from time to time, by notification in the official Gazette, exempt from the operation of all or any of the provisions of this Act, or of all or any of the rules made under this Act, any petroleum which has its flashing point at or above one hundred and twenty degrees of Fahrenheit's thermometer and is imported as ordinary cargo and in quantity not exceeding that specified in the notification.

Power to apply this Act to other fluids.

23. The Governor General in Council may, from time to time, by notification in the Gazette of India, apply the whole or any portion of this Act to any inflammable fluid other than petroleum, and may by the notification fix, in substitution for the quantities of petroleum fixed by sections 5, 6 and 10, the quantities of the fluid to which those sections shall apply.

Power to limit operation of enactments relating to municipalities.

24. The Governor General in Council may, from time to time, by notification in the Gazette of India and in the local official Gazette, limit, in any manner he deems fit, the operation of any enactment for the time being in force relating to municipalities in any local area or to any particular municipality, and the exercise of any power conferred by any such enactment, in so far as the enactment relates to the possession or transport of petroleum.

Power to revoke or vary notifications.

25. A notification made under this Act may be revoked or varied by the authority making it by a notification

notification published in the same manner as the notification so revoked or varied.

Procedure for making and publication of rules.

26. (*1*) An authority making rules under this Act shall, before making the rules, publish a draft of the proposed rules for the information of persons likely to be affected thereby.

(*2*) The publication shall be made in such manner as the Governor General in Council, from time to time, by notification in the Gazette of India, prescribes.

(*3*) There shall be published with the draft a notice specifying a date at or after which the draft will be taken into consideration.

(*4*) The authority making the rules shall receive and consider any objection or suggestion which may be made by any person with respect to the draft before the date so specified.

(*5*) A rule made under this Act shall not take effect if it is made by the Governor General in Council until it has been published in the Gazette of India, and if it is made by the Local Government until it has been published in the local official Gazette.

(*6*) The publication in the Gazette of a rule purporting to be made under this Act shall be conclusive proof that it has been duly made.

(*7*) All powers to make rules conferred by this Act may be exercised from time to time as occasion requires.

THE SCHEDULE.

I.—Nature of the Test-apparatus.

The apparatus consists of the following parts :—

(*1*) the oil-cup;

(*2*) the cover, with slide, test-lamp, and clockwork arrangement for opening and closing the holes in the cover and for dipping the test-flame;

(*3*) the water-bath or heating vessel;

(*4*) the

(*4*) the tripod stand, with jacket and spirit-lamp for heating the water-bath;

(*5*) the thermometer for indicating the temperature of the oil in the oil-cup;

(*6*) the thermometer for indicating the temperature of the water in the water-bath;

(*7*) the thermometer for indicating the temperature of the oil before it is poured into the oil-cup;

(*8*) the dropping bottle or *pipette* for replenishing the test-lamp; and

(*9*) a barometer standardised at the Meteorological Office of the province or at any other place appointed by the Local Government.

The oil-cup is a cylindrical flat-bottomed vessel, made of gun-metal or brass, and tinned or silvered inside. A gauge is fixed to the inside of the cup to regulate the height to which it is to be filled with the sample under examination.

The cup is provided with a close fitting overlapping cover, which carries the thermometer, the test-lamp and the adjuncts thereto. The test-lamp is suspended upon two supports by means of trunnions, which allow it to be easily inclined to a particular angle and restored to its original position. The socket in the cover, which is to hold a round bulb thermometer for indicating the temperature of the oil during the testing operation, is so adjusted that the bulb of the latter is always inserted in a definite position below the surface of the liquid.

The cover is provided with three holes, one in the centre and two smaller ones close to the sides. These are closed and opened by means of a pivoted slide. When the slide is moved so as to uncover the holes, the suspended lamp is caught by a projection fixed on the slide, and tilted in such a way as to bring the end of the spout just below the surface of the lid. As the slide moves back so as to cover the holes, the lamp returns to its original position. Upon the cover, in front of and in a line with the nozzle of the lamp, is fixed a white bead, the diameter of which represents the size of the test-flame to be used.

The water-bath or heating vessel is so constructed that, when the oil-cup is placed in position in it, an air-space or air-chamber intervenes between the two; consequently, in applying the test under ordinary circumstances, the heat is transmitted gradually to the oil from the hot water through the air-space. The water-bath is fitted with a socket for receiving a long bulb thermometer,

to

to indicate the temperature of the water. It is also provided with a funnel, an overflow-pipe and two handles.

The water-bath rests upon a tripod stand, which is fitted with a copper cylinder or jacket, so that the bath is surrounded by an enclosed air-space, which retains and regulates the heat. One of the legs of the stand serves as a support for a spirit-lamp, which is attached to it by a small swing bracket.

The clockwork arrangement, by which during the operation of testing the slide is withdrawn, and the test-flame dipped into the cup and raised again as the slide is replaced, is provided with a ratchet key for setting it in action for each test, and with a trigger for starting it each time that the test-flame is applied.

II.—Directions for drawing the Sample and preparing it for testing.

1. *Drawing the sample.*—In all cases the testing officer or some person duly authorised by him shall personally superintend the drawing of the sample from an original unopened tin or other vessel.

An opening sufficiently large to admit of the oil being rapidly poured or syphoned from the tin or other vessel shall be made.

Two bottles, each of the capacity of about 40 fluid ounces, are to be filled with the oil. One of these, the contents of which is intended to be preserved for reference in case of need, is to be carefully corked, the cork being well driven home, cut off level with the neck, and melted sealing-wax worked into it. The other bottle may be either stoppered or corked.

2. *Preparing the sample for testing.*—About ten fluid ounces of the oil, sufficient for three tests, are transferred from the bottle into which the sample has been drawn to a pint flask or bottle, which is to be immersed in water artificially cooled until a thermometer, introduced into the oil, indicates a temperature not exceeding 50° Fahrenheit.

III.—Directions for preparing and using the Test-apparatus.

1. *Preparing the water-bath.*—The water-bath is filled by pouring water into the funnel until it begins to flow out at the overflow-pipe. The temperature of the water at the commencement of each test, as indicated by the long bulb thermometer, is to be 130° Fahrenheit, and this is attained in the first instance by mixing hot and cold water, either in the bath or in a vessel from which the bath is filled, until the thermometer which is provided for testing the temperature of the water gives the proper

proper indication; or the water is heated by means of the spirit-lamp (which is attached to the stand of the apparatus) until the required temperature is indicated.

2. *Preparing the test-lamp.*—The test-lamp is fitted with a piece of cylindrical wick of such thickness that it fills the wick-holder, but may readily be moved to and fro for the purpose of adjusting the size of the flame. In the body of the lamp, upon the wick, which is coiled within it, is placed a small tuft of cotton wool, moistened with petroleum, any oil not absorbed by the wool being removed. When the lamp has been lighted, the wick is adjusted by means of a pair of forceps until the flame is of the size of the bead fixed on the cover of the oil-cup; should a particular test occupy so long a time that the flame begins to get smaller, through the supply of oil in the lamp becoming exhausted, three or four drops of petroleum are allowed to fall upon the tuft of wool in the lamp from the dropping bottle or *pipette* provided for that purpose. This can be safely done without interrupting the test.

3. *Filling the oil-cup.*—The oil-cup having been previously cooled, by placing it bottom downwards in water at a temperature not exceeding 50° Fahrenheit, is to be rapidly wiped dry, placed on a level surface in a good light, and the oil to be tested is poured in very slowly, without splashing, until its surface is level with the point of the gauge which is fixed in the cup. The round bulb thermometer is inserted into the lid of the cup, care being taken that the projecting rim of the collar touches the edge of the socket; the test-lamp, prepared as already described, is placed in position, and the cover is then put on to the cup and pressed down so that its edge rests on the rim of the cup.

4. *Application of the test.*—The water-bath, with its thermometer in position, is placed in some locality where it is not exposed to currents of air, and where the light is sufficiently subdued to admit of the size of the entire test-flame being compared with that of the bead on the cover. The cup is carefully lifted without shaking it, and placed in the bath, the test-lamp is lighted, and the clockwork wound up by turning the key. The thermometer in the oil-cup is now watched, and when the temperature has reached 56° Fahrenheit the clockwork is set in motion by pressing the trigger.

If no flash takes place the clockwork is at once re-wound, and the trigger pressed at 57° Fahrenheit, and so on, at every degree rise of temperature, until the flash occurs, or until a temperature of 95° Fahrenheit has been reached.

If the flash takes place at any temperature below 77° Fahrenheit the temperature at which it occurs is to be recorded.

The

The fresh portions of the sample are then to be successively tested in a similar manner and the results recorded. If no greater difference than 2° Fahrenheit exists between any two of the three recorded results, each result is to be corrected for atmospheric pressure, as hereafter described, and the average of the three corrected results is the flashing point of the sample. In the event of there being a greater difference than 2° Fahrenheit between any two of the results, the series of tests is to be rejected and a fresh series, of three, similarly obtained, and so on until a sufficiently concordant series is furnished, when the results are to be corrected and the average taken in the manner already described.

No flash which takes place within eight degrees of the temperature at which the testing is commenced shall be accepted as the true flashing point of the sample tested. In the event of a flash occurring at or below 64° when the test is applied in the manner above described, the next testing shall be commenced ten degrees lower than the temperature at which the flash had been previously obtained (that is to say, at 54° or thereunder), and this procedure shall be continued until the results of three consecutive tests do not show a greater difference than 2°.

If a temperature of 76° Fahrenheit has been reached without a flash occurring, the application of the test-flame is to be continued at every degree rise of temperature until a temperature of 95° Fahrenheit has been reached. If no flash has occurred up to this point, and if the petroleum is declared to be imported subject to the provisions of the Act, the tests shall not be continued, and the testing officer shall certify that the petroleum has a flashing point over 95° and is not dangerous. But if the petroleum is oil ordinarily used for lubricating purposes and is declared to have its flashing point at or above 200° degrees, or is oil to which a notification of the Local Government exempting it from the operation of the Act will be applicable in the event of the flashing point being found to be at or above 120°, the test shall be continued as 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 200° Fahrenheit or 120° Fahrenheit, as the case

may

may be, 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 200° 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 the barometer, a correction of the observed flashing point may become necessary. The height of the barometer must therefore be determined at the time of making the test for the flashing point. The true height of the barometer for the purpose of the test shall be considered to be the height of the column of mercury measured at 32° Fahrenheit, which is supported by the air pressure at the time of the experiment; that is, the actual height of the barometer at the time of observation duly corrected for any error of the instrument and for its temperature if necessary. For the purpose of applying the correction to the flashing point of the oil obtained by the test, a table is appended to this schedule, giving the flashing points of oils ranging from 65° to 80° Fahrenheit, under pressure 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 inches; 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 the barometer). The substituted number, that is, the true flashing point of the oil, is 73°.

Table

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