

Ammed - A

PAKISTAN
THE ~~INDIAN~~ BOILERS ACT, 1923

(ACT No. V OF 1923)

Q

AND THE PROVINCIAL RULES FRAMED THEREUNDER, NAMELY

✓ THE SIND BOILERS RULES, 1941.

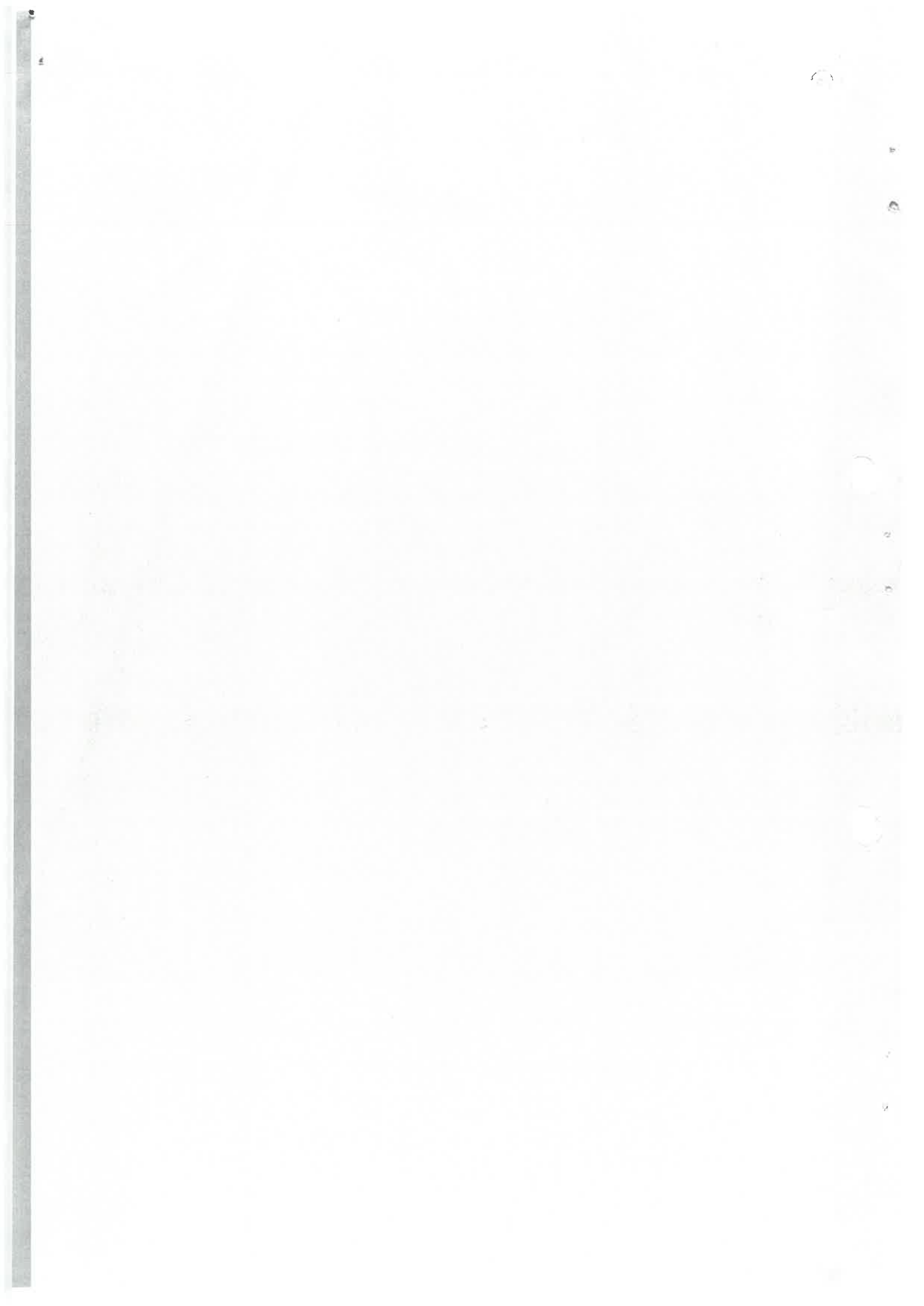
PART I—BOILER INSPECTION ADMINISTRATIVE RULES.

PART II—BOILER ATTENDANTS' RULES.

KARACHI:

PRINTED AT THE GOVERNMENT PRESS

1941.



~~THE INDIAN BOILERS ACT 1923~~

~~(SEC NO. 1 OF 1923)~~

THE PAKISTAN BOILER ACT 1923

ACT NO V OF 1923

AND THE PROVINCIAL RULES FRAMED THEREUNDER, NAMELY

✓ THE SIND BOILERS RULES, 1941.

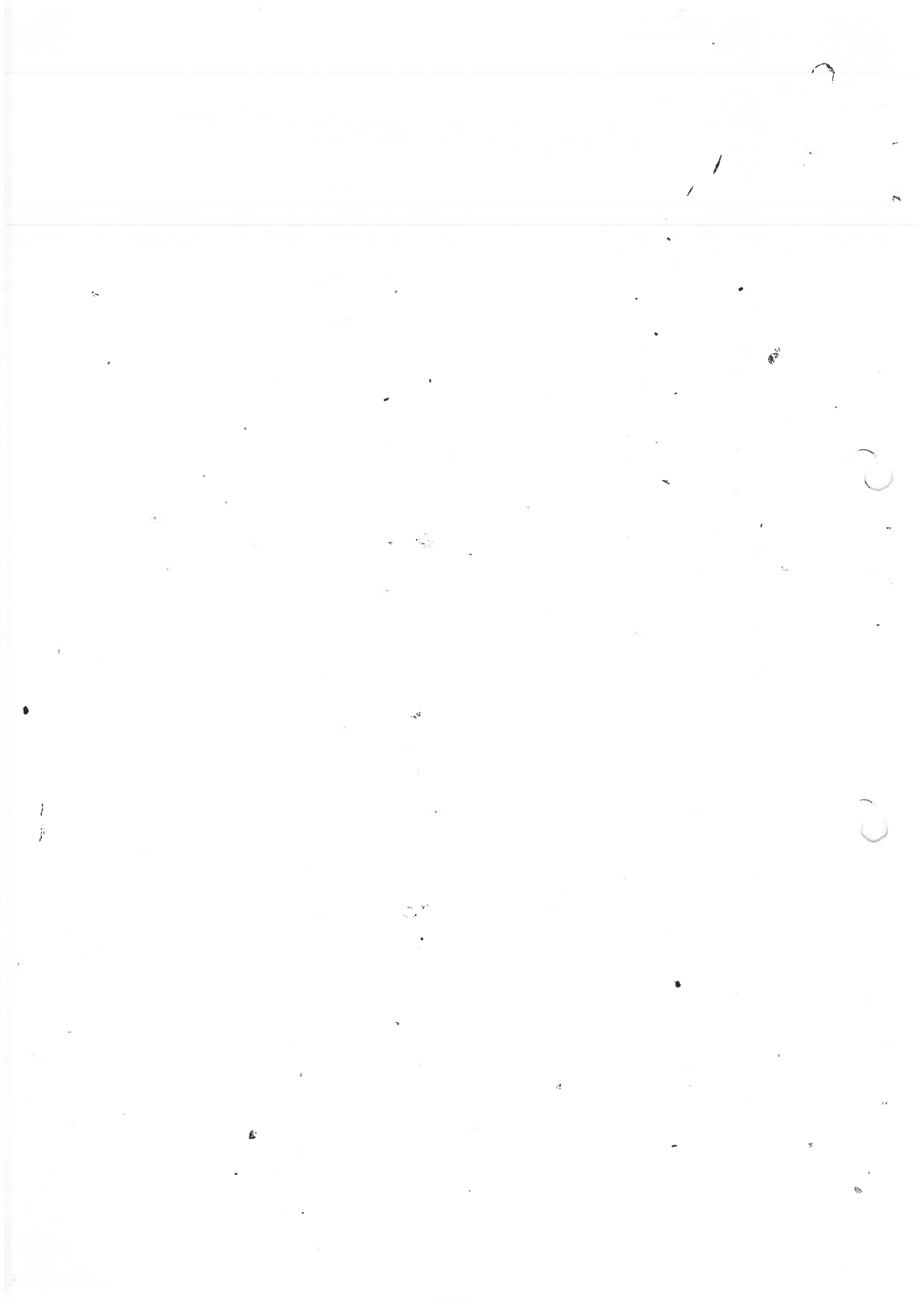
PART I—BOILER INSPECTION ADMINISTRATIVE RULES.

PART II—BOILER ATTENDANTS' RULES.

KARACHI:

PRINTED AT THE GOVERNMENT PRESS

1941.



THE SIND BOILERS RULES, 1941.

TABLE OF CONTENTS.

| RULE | <i>I.—Preliminary.</i> | PAGE |
|--------------------------------|------------------------|------------|
| 1. Division into parts | | 15 |
| 2. Definitions | | <i>ib.</i> |
| 3. Payment of fees | | 16 |
| 4. Location of office | | <i>ib.</i> |

PART I.

BOILER INSPECTOR ADMINISTRATIVE RULES.

II.—Duties of the Chief Inspector.

| | | |
|------------------------------------|--|------------|
| 5. Administrative control | | 16 |
| 6. Duty of general control | | <i>ib.</i> |
| 7. Specific duties | | <i>ib.</i> |
| 8. Instruction to owners | | 17 |
| 9. Registers to be kept | | <i>ib.</i> |
| 10. Control of bills | | 18 |

III.—Duties of Inspector.

| | | |
|---|--|------------|
| 11. Subordinate to Chief Inspector | | 18 |
| 12. General duties of Inspector | | <i>ib.</i> |
| 13. Inspector to see that boilers are worked according to law | | <i>ib.</i> |
| 14. Inspector to advise owners | | <i>ib.</i> |
| 15. Specific duties | | <i>ib.</i> |
| 16. Inspections at special times | | 19 |
| 17. Attendance during hearing of appeals | | <i>ib.</i> |
| 18. Registers to be kept | | <i>ib.</i> |

IV.—Administrative Instructions for Registration.

| | | |
|--|--|------------|
| 19. Importance of registration | | 20 |
| 20. Receipt of applications | | <i>ib.</i> |
| 21. Necessity of avoiding delay | | <i>ib.</i> |
| 22. Register of registered boilers | | <i>ib.</i> |
| 23. Procedure on transfer of a boiler | | <i>ib.</i> |
| 24. Entry of transferred boiler in register | | <i>ib.</i> |
| 25. Note of transferred and dismantled boilers | | 21 |

V.—Administrative Instructions for Inspection

| | | |
|---|--|------------|
| 26. Procedure at inspections: Internal inspection | | 21 |
| 27. External inspection | | <i>ib.</i> |
| 28. Casual working inspections | | 22 |
| 29. Proposals for reduction of pressure | | <i>ib.</i> |
| 30. Repairs to boilers | | <i>ib.</i> |

TABLE OF CONTENTS.

V.—Administrative Instructions for Inspection—contd.

| RULE | PAGE |
|---|------------|
| 31. Entries in Memorandum of Inspection Books | 23 |
| 32. Entries in certificates | <i>ib.</i> |
| 33. Engraving of registry number | <i>ib.</i> |
| 34. Arranging for inspections | 24 |
| 35. Issue of certificates and provisional orders | <i>ib.</i> |
| 36. Provisional orders to be issued after hydraulic test | <i>ib.</i> |
| 37. Forms of provisional orders and certificates | <i>ib.</i> |
| 38. Duplicates certificates | <i>ib.</i> |
| 39. Fees for inspection | <i>ib.</i> |
| 40. Fee to cover inspection and tests | 25 |
| 41. Second fee in default | <i>ib.</i> |
| 42. Sanction of Chief Inspector to second fee | <i>ib.</i> |
| 43. Special fee for inspections out of season | <i>ib.</i> |
| 44. Fee for copy of Registration Book | 26 |
| 45. Duplicate certificate fees | <i>ib.</i> |
| 46. Refund of fees. | <i>ib.</i> |
| <i>VI.—Accidents.</i> | |
| 47. Investigation of accidents | 26 |
| 48. Procedure during inquiry | <i>ib.</i> |
| 49. Power to hold inquiry in writing | <i>ib.</i> |
| 50. Use of boiler after accident | <i>ib.</i> |
| 51. Procedure in case of serious accidents. | <i>ib.</i> |
| 52. Remuneration of assessor | 27 |
| 53. Reference in Annual Report | <i>ib.</i> |
| 54. Unreported accidents | <i>ib.</i> |
| <i>VII.—Appeals.</i> | |
| 55. Filing of appeal | 27 |
| 56. Presentation of appeal | <i>ib.</i> |
| 57. Form of appeal | <i>ib.</i> |
| 58. Fixing date for hearing | <i>ib.</i> |
| 59. Procedure before hearing | 28 |
| 60. Presence of Inspector | <i>ib.</i> |
| 61. Attendance of witnesses | <i>ib.</i> |
| 62. <i>Ex parte</i> decisions | <i>ib.</i> |
| 63. President of Appellate Court | <i>ib.</i> |
| 64. Panel of assessors | <i>ib.</i> |
| 65. Constitution of Appellate Court | <i>ib.</i> |
| 66. Cost in appeal | <i>ib.</i> |
| 67. Fees required for certificates granted on appeal | <i>ib.</i> |
| <i>VIII.—Inquiries into conduct of persons in charge of boilers</i> | |
| 68. Chief Inspector to hold inquiry | 29 |
| 69. Appointment of assessor | <i>ib.</i> |
| 70. Person concerned to be present at inquiry | <i>ib.</i> |
| 71. Record of inquiry | <i>ib.</i> |
| 72. Remuneration of assessors. | <i>ib.</i> |

TABLE OF CONTENTS.

iii

PART II.

BOILER ATTENDANTS' RULES.

IX.—Persons in charge of boilers.

| RULE | PAGE |
|---|------------|
| 73. No boiler to be used without competent person in charge .. | 29 |
| 74. Competent person must possess certificate: Extent of qualification.. | 30 |
| 75. Holder to produce certificate when called for by authorized person. | <i>ib.</i> |
| 76. Owner to furnish Chief Inspector with particulars of certificate .. | <i>ib.</i> |
| 77. Limits of daily period of attendance, reliefs allowed and sphere of action. | <i>ib.</i> |
| 78. When boiler is deemed to be in use | <i>ib.</i> |

XI.—Certificates.

| | |
|--|------------|
| 79. Capabilities of holders of certificates. | 31 |
| 80. Equivalence of certificates | <i>ib.</i> |
| 81. Exchange certificates | <i>ib.</i> |
| 82. Service certificates | <i>ib.</i> |

XI.—Board of Examiners.

| | |
|--|------------|
| 83. Examinations to be held by board of examiners | 32 |
| 84. Nomination of members | <i>ib.</i> |
| 85. Passed applicants to receive certificate | <i>ib.</i> |
| 86. Board empowered to refuse issue of certificate | <i>ib.</i> |
| 87. President of the board | <i>ib.</i> |
| 88. Meeting of members | <i>ib.</i> |
| 89. Minimum number of members | <i>ib.</i> |
| 90. Board's endorsement on application form | 33 |
| 91. Fees to members | <i>ib.</i> |

XII.—Examinations.

| | |
|--|------------|
| 92. Kinds of examination | 33 |
| 93. Time and place of examination | <i>ib.</i> |
| 94. Postponement of examination | <i>ib.</i> |
| 95. Clerical assistance at examinations. | <i>ib.</i> |

XIII.—Applications for Examination.

| | |
|--|------------|
| 96. Form of application | 33 |
| 97. Lodging application | <i>ib.</i> |
| 98. Fees for examination | 34 |
| 99. Remission of fee | <i>ib.</i> |
| 100. Fees of candidates found ineligible | <i>ib.</i> |

XIV.—Testimonials

| | |
|--|------------|
| 101. Candidates must produce satisfactory testimonials | 34 |
| 202. Essential statements | <i>ib.</i> |

TABLE OF CONTENTS.

XIV.—Testimonials—contd.

| RULE | PAGE |
|--|------------|
| 103. Signature and counter-signature | 34 |
| 104. Railway service | <i>ib.</i> |
| 105. Sea service | 35 |
| 106. Candidates for certificates of service | <i>ib.</i> |
| 107. Doubtful testimonials to be authenticated | <i>ib.</i> |
| 108. False testimonials | <i>ib.</i> |
| 109. Filing of copies and return of originals | <i>ib.</i> |

XV.—Age and training.

| | |
|--|------------|
| 110. Age and training of second class candidates | 35 |
| 111. Age and training of first class candidates | <i>ib.</i> |
| 112. Service not in strict conformity with rules | 36 |

XVI.—Examination subjects.

| | |
|---------------------------|----|
| 113. Second class | 36 |
| 114. First class | 37 |

XVII.—Mode of Examinations.

| | |
|--|------------|
| 115. Nature of examination | 37 |
| 116. Examination in writing optional | 38 |
| 117. Examination where held | <i>ib.</i> |
| 118. Practical test essential | <i>ib.</i> |
| 119. Hours of examination | <i>ib.</i> |

XVIII.—Grant of Certificates.

| | |
|--|------------|
| 120. Forms of certificates | 38 |
| 121. Surrender of lower grade certificate | <i>ib.</i> |
| 122. Exchange certificate | <i>ib.</i> |
| 123. Identification requirements | <i>ib.</i> |
| 124. Duplicate of certificates recorded | <i>ib.</i> |
| 125. Grant of duplicate certificates | 39 |
| 126. Applications for duplicate certificates | <i>ib.</i> |
| 127. Fees for duplicate certificates | <i>ib.</i> |
| 128. Invalidity of original certificate | <i>ib.</i> |

XIX.—Exchange Certificates.

| | |
|---|------------|
| 129. Applications for exchange certificates | 39 |
| 130. Fee for exchange certificates | <i>ib.</i> |

XX.—Certificates of service.

| | |
|--|------------|
| 131. Applications for certificates of service | 39 |
| 132. Candidates' practical skill may be tested | 40 |
| 133. Fee for certificate of service | <i>ib.</i> |

XXI.—Penalties.

| | |
|---|------------|
| 134. Penalties | 40 |
| 135. Cognisance of offences | <i>ib.</i> |
| 136. Limitation and previous sanction for prosecution | <i>ib.</i> |

APPENDIX TO PART I.

v
PAGE

| | | |
|--|-----|----|
| Form A—Register Boilers | ... | 41 |
| Form B—Notice of examination of boiler under section 7 and 8 of the Act. | | 42 |
| Form C—General working of boilers. Instruction to Boiler Attendants | ... | 45 |

APPENDIX TO PART II.

| | | |
|---|-----|----|
| Form I—Application for a boiler attendant's certificate of competency | ... | 51 |
| Form II } Certificates of competency to be granted under Rule 120 | ... | 54 |
| Form III } | ... | |
| Form IV—Certificate of service to be granted under Rule 120 | ... | 58 |



ACT No. V OF 1923.

[PASSED BY THE INDIAN LEGISLATURE]

(Received the assent of the Governor-General on the 23rd February 1923.)

An Act to consolidate and amend the Law relating to Steam-boilers.

WHEREAS it is expedient to consolidate and amend the Law relating to steam-boilers: It is hereby enacted as follows:—

Preamble

1. (1) This Act may be called the Indian Boilers Act, 1923.

Short title, extent and commencement.

(2) It extends to the whole of British India, including British Baluchistan and the Santhal Parganas.

(3) It shall come into force on such date as the Governor-General in Council may, by notification in the Gazette of India appoint.

2. In this Act, unless there is anything repugnant in the subject or context,—

Definitions.

(a) "accident" means an explosion of a boiler or steam-pipe or any damage to a boiler or steam-pipe which is calculated to weaken the strength thereof so as to render it liable to explode;

(aa) "Board" means the Central Boilers Board constituted under section 27A;

(b) "boiler" means any closed vessel, exceeding five gallons in capacity which is used expressly for generating steam under pressure, and includes any mounting or other fitting attached to such vessel which is wholly or partly under pressure when steam is shut off;

(c) "Chief Inspector" and "Inspector" mean, respectively, a person appointed to be a Chief Inspector and an Inspector under this Act;

(d) "owner" includes any person using a boiler as agent of the owner thereof and any person using a boiler which he has hired or obtained on loan from the owner thereof;

(e) "prescribed" means prescribed by regulations or rules made under this Act;

(f) "steam-pipe" means any main pipe exceeding three inches in internal diameter through which steam passes directly from a boiler to a prime-mover or other first user, and includes any connected fitting of a steam-pipe; and

(g) "structural alteration, addition or renewal" shall not be deemed to include any renewal or replacement of a petty nature when the part or fitting used for replacement is not inferior in strength, efficiency or otherwise to the replaced part or fitting.

CLV
of
1860.

Limitation of application.

3. (1) Nothing in this Act shall apply in the case of any boiler or steam-pipe—

(a) in any steam-ship as defined in section 3 of the Indian Steam-ships Act, 1884, or in any steam-vessel as defined in section 2 of the Inland Steam-vessels Act, 1917; or

VII
188
I
191

(b) belonging to or under the control of His Majesty's Navy or the Royal Indian Marine Service.

(2) The Governor-General in Council may, by notification in the *Gazette of India*, declare that the provisions of this Act shall not apply in the case of boilers or steam-pipes, or of any specified class of boilers or steam-pipes belonging to or under the control of any railway administered by the Government or by any railway company as defined in clause (5) of section 3 of the Indian Railways Act, 1890.

X
189

Power to limit extent.

4. The Governor-General in Council may, by notification in the *Gazette of India*, exclude any specified area from the operation of all or any specified provisions of this Act.

Appointment of Chief Inspectors and Inspectors.

5. (1) The Local Government may appoint such persons as it thinks fit to be Inspectors for the province for the purposes of this Act, and may define the local limits within which each Inspector shall exercise the powers and perform the duties conferred and imposed on Inspectors by or under this Act.

(2) The Local Government shall likewise appoint a person to be Chief Inspector for the province, who may, in addition to the powers and duties conferred or imposed on the Chief Inspector by or under this Act, exercise any power or perform any duty so conferred or imposed on Inspectors.

b
fr
b
t
b
X
189
th
re
p
In
as
at
te
ar
th
ar
to

(3) Every Chief Inspector and every Inspector shall be deemed to be a public servant within the meaning of the Indian Penal Code.

LV of 860.

6. Save as otherwise expressly provided in this Act, no owner of a boiler shall use the boiler or permit it to be used—

Prohibition of use of unregistered or uncertificated boiler

(a) unless it has been registered in accordance with the provisions of this Act;

(b) in the case of any boiler which has been transferred from one Province to another, until the transfer has been reported in the prescribed manner;

(c) unless a certificate or provisional order authorising the use of the boiler is for the time being in force under this Act;

(d) at a pressure higher than the maximum pressure recorded in such certificate or provisional order;

(e) where the Local Government has made rules requiring that boilers shall be in charge of persons holding certificates of competency, unless the boiler is in charge of a person holding the certificate required by such rules:

Provided that any boiler registered, or any boiler certified or licensed, under any Act hereby repealed shall be deemed to have been registered or certified as the case may be, under this Act;

Provided, further, that, until the expiration of twelve months from the commencement of this Act, nothing in this section shall be deemed to prohibit the use of any boiler in any local area in which the registration of, or a certificate or license for the use of, a boiler was not previously required by law.

7. (1) The owner of any boiler which is not registered under the provisions of this Act apply to the Inspector to have the boiler registered. Every such application shall be accompanied by the prescribed fee.

(2) On receipt of an application under sub-section (1), the Inspector shall fix a date, within thirty days or such shorter period as may be prescribed from the date of the receipt, for the examination of the boiler and shall give the owner thereof not less than ten days' notice of the date so fixed.

(3) On the said date the Inspector shall proceed to measure and examine the boiler and to determine in the prescribed manner the maximum pressure, if any, at which such boiler may be used, and shall report the result of the examination to the Chief Inspector in the prescribed form.

of
No.
e
n
r
a
e
a
r-
er
in VI
as 18
it, I
19
vy
in
all
ed
ol
ay
il-
X
18
in
on
as
of
ee-
md
to
the
by
so

(4) The Chief Inspector on receipt of the report may—

- (a) register the boiler and assign a register number thereto either forthwith or after satisfying himself that any structural alteration, addition or renewal which he may deem necessary has been made in or to the boiler or any steam-pipe attached thereto, or
- (b) refuse to register the boiler :

Provided that where the Chief Inspector refuses to register a boiler, he shall forthwith communicate his refusal to the owner of the boiler together with the reasons therefor.

Under Regulation

(5) The Chief Inspector shall, on registering the boiler, order the issue to the owner of a certificate in the prescribed form authorising the use of the boiler for a period not exceeding twelve months at a pressure not exceeding such maximum pressure as he thinks fit and as is in accordance with the regulations made under this Act.

(6) The Inspector shall forthwith convey to the owner of the boiler the orders of the Chief Inspector and shall in accordance therewith issue to the owner any certificate of which the issue has been ordered, and, where the boiler has been registered, the owner shall within the prescribed period cause the register number to be permanently marked thereon in the prescribed manner.

Renewal of certificate.

8. (1) A certificate authorising the use of a boiler shall cease to be in force—

- (a) on the expiry of the period for which it was granted ; or
- (b) when any accident occurs to the boiler ; or

~~the~~ boiler is moved, the boiler not being a vertical boiler the heating surface of which is less than two hundred square feet, or a portable or vehicular boiler ; or

(d) when any structural alteration, addition or renewal is made in or to the boiler ; or

(e) if the Chief Inspector in any particular case so directs, when any structural alteration, addition or renewal is made in or to any steam-pipe attached to the boiler ; or

(f) on the communication to the owner of the boiler of an order of the Chief Inspector or Inspector prohibiting its use on the ground that it or any steam-pipe attached thereto is in a dangerous condition.

(2) Where an order is made under clause (j) of sub-section (1) the grounds on which the order is made shall be communicated to the owner with the order.

✓ (3) When a certificate ceases to be in force, the owner of the boiler may apply to the Inspector for a renewal thereof for such period not exceeding twelve months as he may specify in the application.

✓ (4) An application under sub-section (3) shall be accompanied by the prescribed fee and, on receipt thereof the Inspector shall fix a date, within thirty days or such shorter period as may be prescribed from the date of the receipt, for the examination of the boiler and shall give the owner thereof not less than ten days' notice of the date so fixed.

Provided that, where the certificate has ceased to be in force owing to the making of any structural alteration, addition or renewal, the Chief Inspector may dispense with the payment of any fee.

(5) On the said date the Inspector shall examine the boiler in the prescribed manner, and if he is satisfied that the boiler and the steam-pipe or steam-pipe attached thereto are in good condition shall issue a renewed certificate authorising the use of the boiler for such period not exceeding twelve months and at a pressure not exceeding such maximum pressure as he thinks fit and as is in accordance with the regulations made under this Act:

Provided that if the Inspector—

(a) proposes to issue any certificate—

(i) having validity for a less period than the period entered in the application; or

(ii) increasing or reducing the maximum pressure at which the boiler may be used, or

(b) proposes to order any structural alteration, addition or renewal to be made in or to the boiler or any steam-pipe attached thereto, or

(c) is of opinion that the boiler is not fit for use,

the Inspector shall, within forty-eight hours of making the examination, inform the owner of the boiler in writing of his opinion and the reasons therefor, and shall forthwith report the case for orders to the Chief Inspector.

48 hours

Chief Inspector
e
e
s
r
e
e
e
al
to
is
s,
is
or
in
ig
h-

114
6
(6) The Chief Inspector, on receipt of a report under sub-section (5), may, subject to the provisions of this Act and of the regulations made hereunder, order the renewal of the certificate in such terms and on such conditions, if any, as he thinks fit, or may refuse to renew it:

Provided that where the Chief Inspector refuses to renew a certificate, he shall forthwith communicate his refusal to the owner of the boiler, together with the reasons therefor.

(7) Nothing in this section shall be deemed to prevent an owner of a boiler from applying for a renewed certificate therefor at any time during the currency of a certificate.

9. Where the Inspector reports the case of any boiler to the Chief Inspector under sub-section (3) of section 7 or sub-section (5) of section 8, he may, if the boiler is not a boiler the use of which has been prohibited under clause (f) or sub-section (1) of section 8, grant to the owner thereof a provisional order in writing permitting the boiler to be used at a pressure not exceeding such maximum pressure as he thinks fit and as is in accordance with the regulations made under this Act pending the receipt of the orders of the Chief Inspector. Such provisional order shall cease to be in force—

(a) on the expiry of six months from the date on which it is granted, or

(b) on receipt of the orders of the Chief Inspector, or

(c) in any of the cases referred to in clauses (b), (c), (d), (e) and (f) of sub-section (1) of section 8,

and on so ceasing to be in force shall be surrendered to the Inspector.

10. (1) Notwithstanding anything hereinbefore contained, when the period of a certificate relating to a boiler has expired, the owner shall, provided that he has applied before expiry of that period for a renewal of the certificate, be entitled to use the boiler at the maximum pressure entered in the former certificate pending the issue of orders on the application.

(2) Nothing in sub-section (1) shall be deemed to authorise the use of a boiler in any of the cases referred to in clauses (b), (c), (d), (e) and (f) of sub-section (1) of section 8 occurring after the expiry of the period of the certificate.

Provisional
Orders

Use of boiler
pending
grant of
certificate.

11. The Chief Inspector may at any time withdraw or revoke any certificate or provisional order on the report of an Inspector or otherwise— Revocation of certificate or provisional order

- (a) if there is reason to believe that the certificate or provisional order has been fraudulently obtained or has been granted erroneously or without sufficient examination; or
- (b) if the boiler in respect of which it has been granted has sustained injury or has ceased to be in good condition; or
- (c) where the Local Government has made rules requiring that boilers shall be in charge of persons holding certificates of competency, if the boiler is in charge of a person not holding the certificate required by such rules; or
- (d) where no such rules have been made, if the boiler is in charge of a person who is not, having regard to the condition of the boiler, in the opinion of the Chief Inspector competent to have charge thereof:

Provided that where the Chief Inspector withdraws or revokes a certificate or provisional order on the ground specified in clause (d), he shall communicate to the owner of the boiler his reasons in writing for the withdrawal or revocation, and the order shall not take effect until the expiry of thirty days from the receipt of such communication.

12. No structural alteration, addition or renewal shall be made in or to any boiler registered under this Act unless such alteration, addition or renewal has been sanctioned in writing by the Chief Inspector. Alterations and renewals to boilers.

13. Before the owner of any boiler registered under this Act makes any structural alteration, addition or renewal in or to any steam-pipe attached to the boiler, he shall transmit to the Chief Inspector a report in writing of his intention, and shall send therewith such particulars of the proposed alteration, addition or renewal as may be prescribed. Alterations and renewals to steam-pipes.

14. (1) On any date fixed under this Act for the examination of a boiler, the owner thereof shall be bound— Duty of owner at examination.

- (a) to afford to the Inspector all reasonable facilities for the examination and all such information as may reasonably be required of him;

(b) to have the boiler properly prepared and ready for examination in the prescribed manner; and

(c) in the case of an application for the registration of a boiler, to provide such drawings, specifications, certificates and other particulars as may be prescribed.

(2) If the owner fails, without reasonable cause, to comply with the provisions of sub-section (1), the Inspector shall refuse to make the examination and shall report the case to the Chief Inspector who shall, unless sufficient cause to the contrary is shown, require the owner to file a fresh application under section 7 or section 8, as the case may be, and may forbid him to use the boiler notwithstanding anything contained in section 10.

Production of certificates, etc.

15. The owner of any boiler who holds a certificate or provisional order relating thereto shall, at all reasonable times during the period for which the certificate or order is in force, be bound to produce the same when called upon to do so by a District Magistrate, Commissioner of Police or Magistrate of the first class having jurisdiction in the area in which the boiler is for the time being, or by the Chief Inspector or by an Inspector or by any Inspector appointed under the Indian Factories Act, 1934 (XXV of 1934), or by any person specially authorised in writing by a District Magistrate or Commissioner of Police.

Transfer of certificates, etc.

16. If any person becomes the owner of a boiler during the period for which a certificate or provisional order relating thereto is in force, the preceding owner shall be bound to make over to him the certificate or provisional order.

Powers of entry.

17. An Inspector may, for the purpose of inspecting or examining a boiler or any steam-pipe attached thereto or of seeing that any provision of this Act or of any regulation or rule made hereunder has been or is being observed, at all reasonable times enter any place or building within the limits of the area for which he has been appointed in which he has reason to believe that a boiler is in use.

Report of accidents.

18. (1) If any accident occurs to a boiler or steam-pipe, the owner or person in charge thereof shall, within twenty-four hours of the accident, report the same in writing to the Inspector. Every such report shall contain a true description of the nature of the accident and of the injury, if any, caused thereby to the boiler or to the steam-pipe or to any person, and shall be in sufficient detail to enable the Inspector to judge of the gravity of the accident.

(2) Every person shall be bound to answer truly to the best of his knowledge and ability every question put to him in writing by the Inspector as to the cause, nature or extent of the accident.

m
re
to
or

ma
lod
to

say
Ch
call

abl

19. Any person considering himself aggrieved by—

Appeals to Chief Inspector.

- (a) an order made or purporting to be made by an Inspector in the exercise of any power conferred by or under this Act, or
- (b) a refusal of an Inspector to make any order or to issue any certificate which he is required or enabled by or under this Act to make or issue,

may, within thirty days from the date on which such order or refusal is communicated to him, appeal against the order or refusal to the Chief Inspector.

20. Any person considering himself aggrieved by an original or appellate order of the Chief Inspector—

Appeals to appellate authority.

- (a) refusing to register a boiler or to grant or renew a certificate in respect of a boiler; or
- (b) refusing to grant a certificate having validity for the full period applied for; or
- (c) refusing to grant a certificate authorising the use of a boiler at the maximum pressure desired; or
- (d) withdrawing or revoking a certificate or provisional order; or
- (e) reducing the amount of pressure specified in any certificate or the period for which such certificate has been granted; or
- (f) ordering any structural alteration, addition or renewal to be made in or to a boiler or steam-pipe, or refusing sanction to the making of any structural alteration, addition or renewal in or to a boiler,

may within thirty days of the communication to him of such order, lodge with the Chief Inspector an appeal to an appellate authority to be constituted by the Local Government under this Act.

21. An order of an appellate authority under section 20 and, save as otherwise provided in sections 19 and 20, an order of the Chief Inspector or of an Inspector shall be final and shall not be called in question in any Court.

Finality of orders.

22. Any owner of a boiler who refuses or without reasonable excuse neglects—

- (i) to surrender a provisional order as required by section 9, or
- (ii) to produce a certificate or provisional order when duly called upon to do so under section 15, or

Minor penalties.

(iii) to make over to the new owner of a boiler a certificate or provisional order as required by section 16,

shall be punishable with fine which may extend to one hundred rupees.

Penalties for illegal use of boiler.

23. Any owner of a boiler who, in any case in which a certificate or provisional order is required for the use of the boiler under this Act, uses the boiler either without any such certificate or order being in force or at a higher pressure than that allowed thereby, shall be punishable with fine which may extend to five hundred rupees, and, in the case of a continuing offence with an additional fine which may extend to one hundred rupees for each day after the first day in regard to which he is convicted of having persisted in the offence.

Other penalties.

24. Any person who—

(a) uses or permits to be used a boiler of which he is the owner and which has been transferred from one Province to another without such transfer having been reported as required by section 6, or

(b) being the owner of a boiler fails to cause the register number allotted to the boiler under this Act to be marked on the boiler as required by sub-section (6) of section 7, or

(c) makes any structural alterations, addition or renewal in or to a boiler without first obtaining the sanction of the Chief Inspector when so required by section 12, or to a steam-pipe without first informing the Chief Inspector, when so required by section 13, or

(d) fails to report an accident to a boiler or steam-pipe when so required by section 18, or

(e) tampers with a safety valve of a boiler so as to render it inoperative at the maximum pressure at which the use of the boiler is authorised under this Act.

shall be punishable with fine which may extend to five hundred rupees.

Penalty for tampering with register mark.

25. (1) Whoever removes, alters, defaces, renders invisible or otherwise tampers with the register number marked on a boiler in accordance with the provisions of this Act or any Act repealed hereby, shall be punishable with fine which may extend to five hundred rupees.

b
re
e

u
d
sh
In

tr
M

sh
tic

ex
of
tio
nor

oth
tra

sta

(2) Whoever fraudulently marks upon a boiler a register number which has not been allotted to it under this Act or any Act repealed hereby, shall be punishable with imprisonment which may extend to two years, or with fine, or with both.

26. No prosecution for an offence made punishable by or under this Act shall be instituted except within six months from the date of the commission of the offence and no such prosecution shall be instituted without the previous sanction of the Chief Inspector. Limitation and previous sanction for prosecutions.

27. No offence made punishable by or under this Act shall be tried by a Court inferior to that of a Presidency Magistrate or a Magistrate of the first class. Trial of offences.

27A. (1) A Board to be called the Central Boilers Board shall be constituted to exercise the powers conferred by section 28.

(2) The Board shall consist of fourteen members, namely:—

(a) a chairman to be nominated by the Governor-General in Council:

(b) one member to be nominated by each of the local Governments of Madras, Bombay, Bengal, the United Provinces, the Punjab, Bihar, the Central Provinces, Assam, the North-West Frontier Province, Sind and Orissa:

(c) one member, holding office for a period of three years, to be nominated alternately by the Local Government of Delhi and the Local Government of Ajmer-Merwara: and

(d) one member to be nominated by the Chief Commissioner of Railways.

(3) Any vacancy occurring in the Board, otherwise than by the expiry of the term of office of the member referred to in clause (c) of sub-section (2), shall be filled as soon as may be by a nomination made by the authority by whom the member vacating office was nominated.

(4) The Board shall have full power to regulate by by-laws or otherwise its own procedure and the conduct of all business to be transacted by the Board.

(5) The powers of the Board may be exercised notwithstanding any vacancy in the Board.

Power to make regulations.

28. The Board may, by notification in the *Gazette of India*, make regulations consistent with this Act for all or any of the following purposes, namely:—

- (a) for laying down the standard conditions in respect of material, design and construction which shall be required for the purpose of enabling the registration and certification of a boiler under this Act:
- (aa) for prescribing the circumstances in which, the extent to which, and the conditions subject to which variation from the standard conditions laid down under clause (a) may be permitted:
- (b) for prescribing the method of determining the maximum pressure at which a boiler may be used:
- (c) for regulating the registration of boilers, prescribing the fees payable therefor, the drawings, specifications, certificates and particulars to be produced by the owner, the method of preparing a boiler for examination, the form of the Inspector's report thereon, the method of marking the register number, and the period within which such number is to be marked on the boiler:
- (d) for regulating the inspection and examination of boilers and steam-pipes, and prescribing forms of certificates therefor:
- (e) for ensuring the safety of persons working inside boiler: and
- (f) for providing for any other matter which is not, in the opinion of the Board, a matter of merely local or provincial importance.

Power to make rules.

29. The Local Government may, by notification in the *Official Gazette*, make rules consistent with this Act and the regulations made thereunder for all or any of the following purposes, namely:—

- (a) for prescribing the qualifications, and duties of the Chief Inspector and of Inspectors, for regulating the salary, allowances and conditions of service, for prescribing or constituting authorities to which they shall respectively be subordinate, and the limits of the administrative control to be exercised by such authorities;

Increase Fee

- (b) for regulating the transfer of boilers ;
- (c) for providing for the registration and certification of boilers in accordance with the regulations made under this Act ;
- (d) for requiring boilers to be in charge of persons holding certificates of competency, and for prescribing the conditions on which such certificates may be granted ;
- (e) for prescribing the times within which Inspectors shall be required to examine boilers under section 7 or section 8 ;
- ✓ (f) for prescribing the fees payable for the issue of renewed certificates and the method of determining the amount of such fees in each case ;
- (g) for regulating inquiries into accidents ;
- (h) for constituting the appellate authority referred to in section 20, and for determining its powers and procedure ;
- (i) for determining the mode of disposal of fees, costs and penalties levied under this Act ; and
- (j) generally to provide for any matter which is, in the opinion of the Local Government, a matter of merely local importance in the Province ;

Provided that the previous sanction of the Governor-General in Council shall be required to the making of any rule under clause (j).

X 30. Any regulation or rule made under section 28 or section 29 may provide that a contravention thereof shall be punishable with fine which may extend to one hundred rupees. Penalty for breach of rules.

✓ 31. (1) The power to make regulations and rules conferred by sections 28 and 29 shall be subject to the condition of the regulations and rules being made after previous publication. Publication of regulation and rules.

(2) Regulations and rules so made shall be published in the *Gazette of India* and the local *Official Gazette*, respectively, and, on such publication, shall have effect as if enacted in this Act.

32. All fees, costs and penalties levied under this Act shall be recoverable as arrears of land-revenue. Recovery of fees, etc.

Applicability
to the Crown

33. Save as otherwise expressly provided, this Act shall apply to boilers and steam-pipes belonging to the Crown.

Power to
suspend in
case of
emergency.

34. (1) The Local Government may, by notification in the local *Official Gazette*, exempt from the operation of this Act, subject to such conditions and restrictions as it thinks fit, any boilers or classes or types of boilers used exclusively for the heating of buildings or the supply of hot water.

(2) In case of any emergency, the Local Government may, by general or special order in writing, exempt any boiler or steam-pipe from the operation of all or any of the provisions of this Act.

Repeal of
enactments.

35. On and from the commencement of this Act, the enactments mentioned in the Schedule shall be repealed to the extent specified in the fourth column thereof:

Provided that any Chief Inspector or Inspector appointed under any Act so repealed shall be deemed to have been appointed under this Act.

**POLITICAL AND MISCELLANEOUS DEPARTMENT
(MISCELLANEOUS).**

Sind Secretariat, Karachi, 11th March 1941.

No. 162-M./40.—In exercise of the powers conferred by section 29 of the Indian Boilers Act, 1923 (Act V of 1923), His Excellency the Governor of Sind is pleased to make the following rules, namely:—

THE SIND BOILER RULES, 1941.

I.—Preliminary.

1. *Division into parts.*—These rules are divided into two parts as follows, namely:—

PART I.—Boiler Inspection Administrative Rules; and

PART II.—Boiler Attendants' Rules.

The two Parts shall come into force from the date of this notification.

2. *Definitions.*—In these rules, unless there is anything repugnant in the subject or context,—

(a) "the Act" means the Indian Boilers Act, 1923;

(b) "Section" means a section of the said Act;

(c) "Regulation" means a regulation framed by the Central Boilers Board under section 28 of the said Act;

(d) "Rule" means a rule framed by the Government of Sind, under section 29 of the said Act.

(e) "Chief Inspector" and "Inspector" mean respectively a person appointed to be a Chief Inspector and an Inspector of Boilers for the Province of Sind under the Indian Boilers Act, 1923.

3. *Payment of fees.*—All fees payable under the Act shall be deposited by the payer in a Government Treasury or the Reserve Bank of India in the Province of Sind.

Applications under sections 7 and 8 of the Act to which the treasury or bank receipt is affixed shall be deemed to be accompanied by the prescribed fee.

All fees, costs and penalties levied under the Act shall be disposed of in such manner as the Provincial Government shall from time to time direct.

4. *Location of office.*—The location and charge of the office shall be as follows:—

Area.—Sind.

Location.—Revenue Buildings, Karachi.

Officer-in-charge.—Chief Inspector.

PART I

BOILER INSPECTION ADMINISTRATIVE RULES.

1941

II.—Duties of the Chief Inspector.

5. *Administrative control.*—The Chief Inspector shall work under the administrative control of Government, and shall submit to Government—

- (a) an Annual Report on the administration of the Act;
- (b) such other reports and returns as may be called for.

6. *Duty of general control.*—The Chief Inspector is vested with all the powers of an Inspector under the Act. His main duty, however, consists in supervising and controlling the work of the Inspector, and he should only actually inspect or examine boilers in exceptional cases, or where he considers that the work of the Inspector requires a personal check.

7. *Specific duties.*—The Chief Inspector shall—

- ✓ (a) personally check the registration particulars and calculations submitted by the Inspector for all boilers inspected for registration as prescribed in Part II of the Regulations and enter under his own signature the approved working pressure and all orders required by section 7;

Legislated

- (b) enter under his own signature any subsequent entries required in the registration book ;
- (c) obtain from the province of registry the registration book of any boiler the transfer of which is reported under section 6 (b) ;
- (d) approve the programmes of the Inspector with due regard to the convenience of owners generally ;
- ✓(e) examine and countersign the Inspector's Memorandum of Inspection Book of each boiler after each inspection ;
- (f) examine and pass orders on the diaries and returns of the Inspector ;
- (g) pass orders in all cases in which the Inspector proposes to increase or reduce the pressure allowed for any boiler under section 8, or to revoke, cancel or refuse to renew the certificate of a boiler under section 11, or to order important repairs, structural alterations, or renewals in a boiler under section 8 ;
- (h) pass orders in all cases in which it is reported that after due notice the boiler has not been properly prepared for inspection ;
- (i) decide all appeals against the order of the Inspector under section 19 ;
- (j) sanction prosecutions under the Act ;
- (k) inquire into serious accidents to boilers ;

8. *Instructions to owners.*—It shall be the duty of the Chief Inspector to advise owners as regards the maintenance, working and cleaning of boilers ; he should issue a set of instructions on the lines indicated in Form C of the Appendix. These instructions should be hung up in each boiler house.

9. *Registers to be kept.*—The Chief Inspector shall keep in his office—

- (a) a Register in Form A of all boilers registered in the Province, or the registry of which has been transferred from another Province ;
- (b) the Registration Book and Memorandum of Inspection Book of all boilers borne on his register ;
- (c) a Register of appeals ;
- (d) a Register of accidents ;
- (e) a Register of registration and inspection fees received.

10. *Control of bills.*—The Chief Inspector shall be the controlling or countersigning authority in respect of all contingent bills and of travelling allowance bills of the Inspector and the staff.

III—Duties of Inspector.

11. *Subordinate to Chief Inspector.*—The Inspector shall be directly subordinate to and under the control of the Chief Inspector.

✓ (12) *General duties of Inspector.*—The main duties of the Inspector, as laid down in the Act, are the inspection and examination of boilers and steam-pipes. Inspections shall be carried out in strict accordance with Part II of the Regulations and Chapters IV and V of these rules. p-20, p 21, p 29.

13. *Inspector to see that boilers are worked according to law.*—In addition to the inspection and examination of boilers, it is the duty of the Inspector to search for unregistered or uncertificated boilers and to see that certificated boilers are worked in accordance with the terms of their certificates, and with any regulation or rule under the Act for their safe working.

14. *Inspector to advise owner.*—At the time of inspection the Inspector should advise the owner and the person in charge of the boiler of the management and upkeep of the boiler with special reference to the amount of cleaning required in view of the quality of water used.

15. *Specific duties.*—The Inspector shall—

- (a) with regard to the area beyond the limits of the City of Karachi and adjacent districts, for which inspections are arranged from day to day by the Chief Inspector, prepare a programme of inspections with regard to the convenience of owners generally in the most suitable order of places to save time and expenditure in cross journeys and submit it at such periods as may be prescribed at least 14 days before the first date fixed in the programme to the Chief Inspector for approval to enable the 10 days' notice required under sections 7 and 8 to be given to the owner;
- ✓ (b) maintain a Memorandum of Inspection Book for each boiler under his charge and submit it to the Chief Inspector for examination and countersignature after each inspection;
- ✓ (c) keep a diary for weekly submission to the Chief Inspector, showing places visited, boilers registered or inspected with fees paid thereon, variations from the programme and any other important particulars;

Registers

(d) receive applications for registration or inspection under sections 7 or 8, proposals for repairs, alterations, or renewals under sections 12 and 13, and reports of accidents under section 18;

(e) inquire into accidents to boilers and steam pipes and report to the Chief Inspector;

(f) report to the Chief Inspector cases of unreported accidents discovered at the time of inspection;

(g) submit for the orders of the Chief Inspector—

(i) the Memorandum of Inspection Books of all boilers proposed for registration under section 7;

(ii) proposals for increasing or decreasing the pressure of a boiler after inspection under section 8;

(iii) proposals for necessary repairs, structural alterations or renewals to a boiler under sections 8 or 12;

(iv) proposals for revoking, cancelling or refusing to renew a certificate under sections 11 or 8;

(v) report when boilers have not been properly prepared for inspection under section 14;

(vi) proposals for prosecutions under the Act.

16. *Inspections at special times.*—No examination of a boiler shall be made by the Inspector for the purpose of registering or issuing a certificate for a boiler on a Sunday or gazetted public holiday or between the hours of sunset and sunrise without the specific orders of the Chief Inspector in each case. In such cases an extra fee equal to the usual registration or inspection fee for the boiler may be charged and half of the extra fee may be paid to the Inspector.

17. *Attendance during hearing of appeals.*—Under orders of the Chief Inspector, the Inspector shall attend during the hearing of appeals with regard to boilers under his charge before the Chief Inspector or the Appellate Authority.

18. *Registers to be kept.*—The Inspector shall keep—

(a) a Register of work done;

(b) a Register of accidents;

(c) a Register of registration and inspection fees received.

Duties of Inspectors According to the

IV.—Administrative Instructions for Registration.

19. *Importance of registration.*—Technical regulations for the registration of boilers and the scale of fees for registration are prescribed in Part II of the Regulations. The details of measurements recorded at the time of registration constitute a permanent record for the boiler and determine the original pressure at which the boiler is allowed to work. It is accordingly essential that the work should be done with the greatest care and precision.

20. *Receipt of applications.*—Applications for registration shall be made under section 7 (1) either to the Chief Inspector, or to the Inspector and shall be accompanied under Rule 3 by a receipt for the prescribed fee. No application shall be accepted without the receipt. No boiler shall be registered, if on measurement the fee is found to be deficient, until the deficit has been paid. Any excess payment will be refunded at the time of registration.

21. *Necessity of avoiding delay.*—It is essential that no delay should occur in registration. In large towns, the measurements under section 7 (3) should ordinarily be completed and the report submitted to the Chief Inspector within 7 days of the receipt of the application; in no case should the interval exceed 30 days. The Chief Inspector should issue his orders under section 7 (4) without delay.

22. *Register of registered boilers.*—The Chief Inspector shall maintain a Register of registered boilers in serial order in Form A in two parts: in Part I (boilers originally registered in the Province) the registered number of a boiler shall be the one immediately following the last serial number in the Register. Gap numbers due to boilers being broken up or transferred to another Province shall not be filled up. In Part II (boilers originally registered in other Provinces) entries shall be made as prescribed in Rule 24.

23. *Procedure on transfer of a boiler.*—Whenever a boiler is transferred from another Province into the Province of Sind the owner shall, under section 6 (b) apply to the Chief Inspector for the registration of the transfer; the boiler cannot be used until registration has been effected. The Chief Inspector shall then obtain from the Province from which the boiler was transferred the Registration Book and Memorandum of Inspection Book of the boiler. No fee shall be charged for recording transfers.

24. *Entry of transferred boiler in Register.*—On receipt of the Registration, and Memorandum of Inspection Books, the Chief Inspector shall enter the boiler under its original number in Part II of his Register. The Registration Book and the Memorandum of Inspection Book shall be kept in the Chief Inspector's Office.

25. *Note of transferred and dismantled boilers.*—Whenever a boiler has been transferred to another Province or broken up, the fact shall be noted in the Register. In the case of a boiler that has been permanently dismantled the Registration Book and the Memorandum of Inspection Book shall be destroyed.

~~Instructions for Inspection.~~

Duties of Inspection
according to this

26. *Procedure at inspections: internal inspection.*—Detailed instructions for the inspection of boilers are contained in Part II of the Regulations. The following general procedure at inspection should be observed:—

At a thorough inspection of a boiler the Inspector should, wherever the size and construction of the boiler permit, go inside it and make a thorough inspection of all its internal parts. But before doing so he should satisfy himself that proper provision has been made for disconnection from any other boiler under steam.

Should he find that proper provision for disconnection has not been made or that the boiler has not been properly cleaned or scaled or that it is unreasonably hot he should decline to proceed with the inspection and should report the facts to the Chief Inspector for orders under section 14 (2) of the Act.

When a boiler is of such a size or its construction is such that the Inspector cannot go inside it there must be sufficient sight holes or hand holes provided to enable him to see the principal internal parts. If any important part of a boiler is so constructed that the Inspector cannot examine it he should report the facts to the Chief Inspector for orders.

27. *External inspection.*—Boilers must be examined externally as well as internally; particular attention should be paid to the external parts of the boilers where in contact with seating blocks and brick-work, especially when the situation is damp. Having regard to many serious defects discovered, the Inspector should take care, in order to ensure proper inspection, that boilers, of which the whole of the outside cannot be readily examined, are cleared whenever they consider it necessary of any concealing covering, supports or fittings.

Saddle tanks and engine fittings of locomotive type boilers should be removed for inspection of the parts underneath at the first inspection and at any reasonable period afterwards if the Inspector cannot satisfy himself. If the owners in any special case have any good reasons for not wishing to clear covered parts the case should be submitted to the Chief Inspector for orders. The Inspector must keep in mind that he is not to certify as efficient any boiler regarding the condition of which he cannot thoroughly satisfy himself.

28. *Casual working inspections.*—At the inspection of one of a battery of boilers the Inspector should take the opportunity of examining the other boilers under steam with special reference to the water gauges, pressure gauges and safety valves.

29. *Proposals for reduction of pressure.*—When the Inspector decides that a boiler in one or more of its parts is no longer fit for the pressure approved for it he should, without delay, report his proposals for reducing the pressure to the Chief Inspector and at the same time submit his calculations for the wasted parts for check and approval of pressure. With regard to pitting and wasting of shell plates the Inspector must bear in mind that shell plates ordinarily are considerably stronger in the body of the plate, owing to being unpierced, than at the seams and consequently may become reduced in thickness to an appreciable extent in the body of the plate, *i.e.*, elsewhere than at the seams, and still be stronger than the seams.

30. *Repairs to boilers.*—Under section 12 of the Act the sanction of the Chief Inspector to all repairs proposed for boilers must be obtained beforehand.

A few water tubes or smoke tubes, however, may in an emergency be renewed pending the sanction of the Chief Inspector but all such cases must be reported immediately to the Chief Inspector who may, if he deems fit, notify his sanction to the owner without verification of the renewals by the Inspector.

Generally in repairing boilers the object to be obtained is to make up for damage or wastage by suitable compensation, either by renewal or repair of the part affected. Covering patches applied with the object of hiding defects are a source of danger and must not be passed.

Welding by electric and oxy-acetylene processes may be employed in the repair of boilers, but, as the efficiency of the welding depends largely on the skill and care of the operator each case will have to be decided on its merits.

Proper attention must be paid to the annealing of welded parts. The Inspector should, wherever possible, be present during some part, at least, of the welding operations.

Extensive repairs such as renewal of furnaces, end plates, parts of shell, fireboxes, girders, etc., should be supervised, so far as his other duties permit, by the Inspector, and at such times when fireboxes and smoke tubes of locomotive type boilers are withdrawn, advantage of the opportunity should be taken to inspect the internal parts otherwise inaccessible to close inspection.

Repairs to boilers are prescribed in Part II, Chapter I, Regulation 164, of the Regulations.

31. *Entries in Memorandum of Inspection Books.* — The Inspector shall, as soon as convenient after an inspection, make the necessary entries in the Memorandum of Inspection Book for the boiler and submit the book to the Chief Inspector. Care should be taken to preserve the books and to keep them clean. Inspection notes should briefly state to what extent boilers were cleared of brickwork, lagging or concealing parts; the general condition of the boiler; parts requiring attention or repair and if special preparation is required at the next inspection.

The Inspector should also note in the Memorandum of Inspection books all casual visits, inspections of steam-pipes, visits for inspection of repair, inquiry into accidents, etc., and so provide a useful record of the history of the boiler for his guidance at subsequent inspections.

✓ In making inspections it is important that the Inspector should pay particular attention to entries made in the Memorandum of Inspection Book at previous inspections.

32. *Entries in certificates.*—In addition to the entries required to be made under Regulation 162 in a certificate for a boiler the Inspector should state in the remarks column his requirements, if any, with regard to hydraulic test, removal of lagging, brickwork or other concealing part for the next inspection to enable the owner to have the same properly prepared at that time. He should also state in the same place his requirements regarding the repair or renewal of any part that may be considered fit only for the period of the certificate.

In the repairs column should be entered the year of repair and description of repair effected. Only important repairs should be noted.

His remarks should be brief. In the absence of remarks on the condition of the boiler, the boiler will be considered to be in good condition.

33. *Engraving of Registry Number.*—Paper slips of the proper size bearing the registry number allotted for a boiler will be supplied by the Chief Inspector. The slip should be pasted on the part of the boiler pointed out by the Inspector and the device traced through with a cutting tool. The engraving should then be completed by the removal to the prescribed depth of the metal between the traced lines.

34. *Arranging for inspections.*—In arranging for inspections particular attention should be paid to the provisions of rule 15 (a). The notice required by sections 7 (2) and 8 (4) shall be sent in Form B. If a hydraulic test is necessary in addition to the ordinary inspection ample notice must be given to the owner.

✓ 35. *Issue of certificates and provisional orders.*—In cases in which the Inspector is empowered to issue a certificate under section 8 without further reference, the certificate should ordinarily be issued within 48 hours of the completion of the inspection. Where he proposes to issue a provisional order, the Inspector must satisfy himself that the boiler is fit to be worked at the maximum pressure and for the period entered in the provisional order. The fact of issue of a provisional order must be reported immediately to the Chief Inspector.

→ ✓ 36. *Provisional orders to be issued after hydraulic test.*—Provisional orders should be issued in every case of registration after hydraulic test of boiler if the Inspector is satisfied.

Steam test → The steam test may be witnessed at any convenient time within the period of the provisional order after which, if test was satisfactory, the certificate under section 7 (6) is to be issued.

✓ 37. *Forms of provisional orders and certificates.*—Provisional orders and certificates are prescribed in Forms V and VI respectively of the Regulations.

Period of P.O. The period specified in any provisional order or certificate shall begin on the day following that on which the enabling thorough inspection or hydraulic test is made. Where a certificate supersedes a provisional order during the period of its currency, the period of the certificate shall be retrospective and shall begin from the same time as that of the provisional order.

38. *Duplicate certificates.*—A duplicate of any certificate granted under section 7 or section 8 which is at the time in force shall be granted by the Chief Inspector on the application of the owner of the boiler if the Chief Inspector is satisfied that the duplicate is required for a *bona fide* purpose and the fee prescribed under Rule 45 is paid.

39. *Fees for inspection.*—Fees for inspection shall be calculated on the basis of boiler rating, as prescribed in Part II, Chapter I, Regulation 158 of the Regulations. The following fees are prescribed:

Registration fees.—Fees for registration and first inspection of boilers are prescribed in Regulation 159 of the Regulations.

Inspection fees.—Fees for ordinary inspection of boilers shall be levied in accordance with the following scale:—

| | Rs. |
|---|-----|
| For boiler rating not exceeding 100 | 40 |
| For boiler rating exceeding 100 but not exceeding 300 | 50 |
| For boiler rating exceeding 300 but not exceeding 500 | 55 |
| For boiler rating exceeding 500 but not exceeding 700 | 65 |
| For boiler rating exceeding 700 but not exceeding 900 | 75 |
| For boiler rating exceeding 900 but not exceeding 1,100 | 85 |
| For boiler rating exceeding 1,100 but not exceeding 1,200 | 95 |
| For boiler rating exceeding 1,200 | 100 |

Provided that when any owner is willing to accept a renewed certificate for less than twelve months in order to approximate the date of annual inspection to the date on which other boilers in the locality are inspected, a certificate for such period less than twelve months as may be necessary for such approximation of dates may be granted at a reduced fee to be calculated at one-twelfth of the ordinary fee for each full month, portion of a month not being reckoned.

40. *Fee to cover inspection and tests.*—A fee paid for the inspection of a boiler shall cover thorough inspection, hydraulic test and steam test where such are necessary, subject to the provisions of section 14 (2).

41. *Second fee in default.*—A second fee will be leviable for reinspection in any case where the inspection of a boiler is begun, but, owing to the fault or neglect of the owner or person in charge is not completed within a period of six months from the date of commencement of inspection.

42. *Sanction of Chief Inspector to second fee.*—No extra fee shall be levied except with the sanction of the Chief Inspector.

43. *Special fee for inspections out of season.*—For any inspection of a boiler situate at a place beyond the limits of the city of Karachi which is visited by the Inspector one or more times in a year for the purpose of inspecting boilers, if an owner or person in charge of a boiler fails to avail himself of the services of the Inspector during the usual periods for visiting the district and applies for inspection at a time which would necessitate a special journey by the Inspector then before the Inspector undertakes such a journey the owner or person in charge shall, in addition to the registration or inspection fee, pay such sum into the Government Treasury to cover the rail conveyance and travelling allowance charges of the Inspector from the nearest headquarters as the Chief Inspector may determine.

44. *Fee for copy of Registration Book* :—
For each copy Rs. 5.

45. *Duplicate certificate fees*.—Fees for duplicate certificates under Rule 38 :—
For each Rs. 5.

46. *Refund of fees*.—Fees paid in excess and fees paid for an inspection which for any reason not due to any fault or omission of the owner or person in charge of the boiler has not been made, shall be refunded if a refund is applied for within one year from the date of payment.

VI.—*Accidents.*

47. *Investigation of accidents*.—On the receipt of a report of an accident to a boiler or steam-pipe under section 18 the Inspector should, with the least possible delay, proceed to the place to investigate the accident. If the report is received by the Chief Inspector, he should forward it at once to the Inspector for necessary action.

48. *Procedure during inquiry*.—The Inspector at his inquiry shall make a careful examination of the damaged parts, and shall take such measurements and make such sketches for the purpose of his report, as he may deem necessary. He shall inquire into the circumstances attending the accident and note the time of its occurrence, its nature and extent, the injury caused to persons and the damage done to property. The report should be in the style of the Reports of Preliminary Enquiries under the British Boiler Explosions Acts, 1882 and 1890.

49. *Power to hold inquiry in writing*.—The Inspector is authorized to take the written statements of witnesses and all persons immediately concerned with the accident. In order to comply with the provisions of section 18 (2) the Inspector should present to the owner or person in charge of the boiler a series of written questions on all points that are material to the enquiry.

50. *Use of boiler after accident*.—The Inspector must decide whether the use of the boiler can be permitted at the same or at a lower pressure without repairs or pending the completion of any repairs or alterations that he may order. In no case should he issue a provisional order or renewal certificate, until his orders have been carried out.

51. *Procedure in case of serious accidents*.—The report should be sent without delay to the Chief Inspector; if he considers that the investigation has been sufficient, he will record the facts in his

Register of accidents, and enter a brief account of the accident in the Registration Book, a copy being made in the Memorandum of Inspection Book. If, however, the accident is of a serious nature and in all cases in which an explosion has occurred, the Chief Inspector should, after receipt of the Inspector's report, proceed to investigate the accident personally either alone or with the assistance of a member of the panel of assessors appointed under Rule 64 who may be appointed for this purpose by the Government Reports of such inquiries should be recorded as indicated above.

52. *Remuneration of Assessor.*—The Assessor shall be remunerated at such rate as may be prescribed by the Provincial Government and be allowed the travelling expenses incurred by him in attending the inquiry.

53. *Reference in Annual Report.*—A brief account of all accidents and their causes should be included in the Chief Inspector's Annual Report.

54. *Unreported accidents.*—If in the course of an inspection or at any other time, the Inspector discovers damage which comes within the definition of an accident, but which has not been reported he should report the facts at once to the Chief Inspector for action under section 24 (d).

VII.—*Appeals.*

55. *Filing of appeal.*—Every petition of appeal shall be made in writing either in English or in Sindhi.

56. *Presentation of appeal.*—An appeal may be presented either personally or by registered post to the Chief Inspector.

57. *Form of appeal.*—The petition of appeal shall be accompanied by the original order, notice or report appealed against, or by a certified copy thereof, or where no such order, notice or report has been made in writing, by a clear statement of the facts appealed against, the grounds of appeal and the referring section of the Act.

58. *Fixing date for hearing.*—On receipt of an appeal, the Chief Inspector shall, if the appeal is to be heard by himself, at once fix a date for hearing the appeal; and if it is to be heard by the appellate authority, obtain a date for the hearing of the appeal from the President of the Court. It is important that there should be no delay in the decision of appeals, as the stoppage of a boiler is likely to put the owner thereof to great inconvenience. The decision should ordinarily be given within 10 days from the receipt of the petition of appeal.

59. *Procedure before hearing.*—When the date for hearing has been fixed, the Chief Inspector shall at once issue a notice to the appellant stating the date for hearing and informing him that if he wishes to be heard in support of the appeal or to produce evidence he must be present either in person or by authorized agent with his evidence on the date fixed. The notice shall be sent by registered post to such address as shall be entered in the petition of appeal.

60. *Presence of Inspector.*—In all appeals the Chief Inspector shall decide whether the presence of the Inspector is necessary, and shall issue orders accordingly.

61. *Attendance of witnesses.*—The Appellate Court shall have power to secure the attendance of witnesses and to make local inquiries under the provisions of the Code of Civil Procedure.

62. *Ex parte decisions.*—If the appellant is not present on the date fixed, the appeal may be decided in his absence.

63. *President of Appellate Court.*—The Provincial Government shall appoint an officer to be President of the Appellate Court for such period as it thinks fit. The President shall be an officer who has exercised the powers of a judge or magistrate or a person who is a barrister, advocate, pleader or a graduate in law of any University in the British Empire and has exercised or is exercising the powers of a Court within the meaning of section 3 of the Indian Evidence Act, 1872.

64. *Panel of Assessors.*—The Provincial Government shall constitute a panel of assessors for the purpose of assisting in the hearing of appeal. Assessors must be fully qualified mechanical engineers.

65. *Constitution of Appellate Court.*—Whenever the date for an appeal before the Appellate Court has been fixed, the Chief Inspector shall, under the orders of the President of the Court, arrange for the attendance of 3 members of the panel constituted under the preceding rule to act as assessors.

66. *Costs in appeals.*—In appeals before the Appellate Court, the President is authorized to fix the costs and recover them from the appellant in any case in which the appeal is dismissed; in all cases of appeal in which a local inspection is required by the appellant he shall deposit in advance the full costs of such inspection.

67. *Fees required for certificates granted on appeal.*—Any order on appeal authorizing the registering of a boiler or the grant or renewal of a certificate shall be deemed to be subject to the payment of such fees as are prescribed by rules or regulations framed under the Act.

VIII.—Inquiries into conduct of persons in charge of Boilers.

68. Chief Inspector to hold inquiry.—If the Chief Inspector has reason to believe, from any cause whatever, that an inquiry should be made to ascertain whether a person in charge of a boiler is incompetent or addicted to drugs or drunkenness or has been guilty of any serious misconduct or negligence it shall be his duty to inquire into such allegation.

He may either make such inquiry personally or cause it to be made by a deputy.

69. Appointment of Assessor.—The Provincial Government shall appoint as assessor in such inquiry either one of the panel of assessors for hearing appeals under section 20 or any fully qualified mechanical engineer who appears to the Provincial Government to be a fit and proper person to be an assessor.

70. Person concerned to be present at inquiry.—The inquiry shall be held in the presence of the person whose conduct forms the subject of the inquiry who shall be allowed to make any statement he may wish to make and to produce evidence in his defence. He shall on demand forthwith give up his certificate to the Chief Inspector and abide the result of the inquiry.

71. Record of inquiry.—The Chief Inspector shall forward to the Provincial Government the record of the inquiry together with the opinions of the officer conducting the inquiry and of the assessor and shall make such recommendation with regard to the suspension or cancellation of the person's certificate as he may think fit.

72. Remuneration of Assessor.—The assessor shall be remunerated at such rate as may be prescribed by the Provincial Government and be allowed the travelling expenses incurred by him in attending the court.

PART II.

duties of Inspector during inspection

BOILER ATTENDANTS' RULES.

IX.—Persons in charge of Boilers.

73. No boiler to be used without competent person in charge.—Subject to the proviso below no boiler as defined in section 2 (b) that is liable to inspection under the Act shall be used (see Rule 78) within the Province of Sind unless there is a fit and proper person in immediate attendance and charge who is employed by the owner for the purpose of attending to the working of the boiler.

Provided that the restrictions contained in this Rule shall not apply to a boiler of such capacity and used for such purpose as may be specified by the Provincial Government by notification in the *Sind Government Gazette*.

74. *Competent person must possess certificate; extent of qualification.*—No person who does not possess a certificate of competency or a certificate of service granted under these Rules or under the Bombay Boiler Rules, 1924, shall be deemed a fit and proper person to be in attendance and charge of a boiler; and no holder of any such certificate shall be deemed a fit and proper person to be in attendance and charge of any boiler except to the extent of his qualification indicated by his said certificate.

75. *Holder to produce certificate when called for by authorised person.*—The holder of a certificate shall at any reasonable time during his charge of a boiler produce his certificate when called upon to do so by any of the persons empowered under section 15 to call for the production of the certificate or provisional order of the boiler.

76. *Owner to furnish Chief Inspector with particulars of certificate.*—Any owner of a boiler who engages a person to be in charge of it shall at once furnish to the Chief Inspector particulars of the person with the grade, number, date and place of issue of his certificate.

77. *Limits of daily period of attendance, reliefs allowed and sphere of action.*—The hours of a boiler attendant are regulated by the Factories Act, 1934 (XXV of 1934), and the rules framed and exemptions granted thereunder.

An attendant in charge of boilers for which a certificate of the first class is required may be relieved of charge in any one day for not more than two periods which combined are not to exceed two hours in duration by a person holding a certificate of the second class.

In special cases, the holder of a first class certificate may, with the consent in writing of the Chief Inspector or the Inspector, be relieved by a person holding a certificate of the second class for a period which may extend to seven consecutive days.

✓ A person in charge of a boiler will be held to be in immediate attendance and charge of the same when he is within one hundred and fifty feet of such boiler.

78. *When boiler is deemed to be in use.*—A boiler will be deemed to be in use when there is active fire in the furnace, firebox or fireplace for the purpose of heating the water in the boiler. When the fire is removed, extinguished, or effectively banked so that no appreciable heat passes from the fire to the water and all steam and water connections are closed, a boiler will be deemed to be not in use.

X.—Certificates.

79. *Capabilities of holders of certificates.*—Certificates of competency granted under these rules shall be of two classes. A certificate of the first class shall qualify the holder thereof to be in charge of a set of connected boilers of any kind or capacity or of so many separate or connected boilers belonging to the same owner so situated that no one of them is distant more than 150 feet from any other of them, and a certificate of the second class shall qualify the holder thereof to be in charge of any single separate boiler.

80. *Equivalence of certificates.*—Holders of certificates of proficiency granted under Part III, and holders of certificates of competency or of service of the 1st Class granted under Part II of the Bombay Boilers Rules, 1924, prior to 1st April 1936, and holders of certificates of competency or of service as first and second class engineers granted under the Bombay Boilers Inspection Act will, for the purpose of Rule 74 be deemed to hold certificates of competency of the 1st Class under Part II of these Rules, and holders of certificates of competency or of service of the 2nd Class granted under Part II of the Bombay Boilers Rules, 1924, prior to 1st April 1936, and holders of certificates of competency or of service as 3rd Class engineers granted under the Bombay Boilers Inspection Act, will be deemed to hold certificates of competency of the 2nd Class under Part II of these Rules.

81. *Exchange certificates.*—Any person in possession of a certificate of proficiency or of competency granted by any competent authority in British India or in the United Kingdom, or in any British Dominion or Colony, shall be entitled to receive a certificate of competency as aforesaid without undergoing examination.

The certificate granted under this rule shall be of such class as the Board of Examiners or a majority of the members of the said Board on consideration of the nature of the certificate in the person's possession shall determine.

Provided that if on scrutiny of the testimonials of an applicant for an exchange certificate of competency under this rule, the Board of Examiners has doubts about the competence of the applicant for the charge and management of a boiler, or if it is necessary to determine the class of certificate for which he is qualified, the Board of Examiners may subject the applicant to such practical examination as it deems fit.

82. *Service certificates.*—The board may, in the case of any person who satisfies it that he has served for a period of not less than ten years as a boiler attendant or head fireman in working charge of a set of boilers or that he has served for a period of not less than six years in working charge of a separate boiler prior to

15th December 1924 the date on which the Bombay Boiler Rules came into force and that he is possessed of competent practical skill for such work, grant to him a certificate of service to the effect that he is qualified to the like extent as the holder of a certificate of competency of the first class or of the second class, respectively.

Such certificate of service shall be signed as in the case of a certificate of competency.

A certificate of service so granted shall have the same effect as a certificate of competency granted under these rules.

XI.—Board of Examiners.

83. *Examinations to be held by Board of Examiners.*—Examinations shall be held periodically by a Board of Examiners at such places and on such dates as the Provincial Government shall determine, for the purpose of determining the fitness of persons who desire to qualify as attendants on boilers.

84. *Nomination of Members.*—The Provincial Government shall from time to time nominate competent engineers having knowledge of prime movers and boilers to be members of the Board of Examiners for the said examinations.

85. *Passed applicants to receive certificate.*—Every applicant for examination who is declared by the said Board to have passed an examination shall receive a certificate of competency in accordance with the Board's decision as to his qualifications, which shall be signed by the members of the Board.

86. *Board empowered to refuse issue of certificate.*—The Board is empowered to refuse the issue of a certificate of competency or service to any candidate who in the opinion of the majority of the members appears too old or physically unfit through deformity, constitutional weakness, bad eyesight, deafness or loss of a limb to perform properly the duties of a boiler attendant.

Any such candidate may appeal to the Chief Inspector against the decision of the Board and the Chief Inspector may send the candidate before a Medical Board or Civil Surgeon for medical examination in which case the Board shall either issue or refuse to issue a certificate in accordance with the medical opinion.

87. *President of the Board.*—The Chief Inspector shall ordinarily be *ex-officio* President of the Board of Examiners.

88. *Meetings of Members.*—Members of the Board shall meet at the request of the Chief Inspector for the purpose of conducting examinations in such place and at such time as may be specified in the notice of meeting.

89. *Minimum number of Members.*—Each examination shall be conducted by not less than two members of the Board.

90. *Board's endorsement on application form.*—The Board shall endorse on the printed application form of each candidate the result of his examination for a certificate of competency or its decision in regard to applications for exchange and service certificates. The endorsed applications shall be returned to the President at the close of the examinations.

91. *Fees to Members.*—Each member of the Board shall be entitled to a fee of fifty rupees for each meeting of the Board lasting more than three hours or a fee of twenty-five rupees for each meeting lasting less than three hours at which any duty prescribed in these rules has been performed and which he had attended from the beginning to the end.

XII.—Examinations.

92. *Kinds of examination.*—Examinations shall be of two kinds, one for each class of certificate of competency which the Board is empowered to grant, namely, certificates of competency as first class boiler attendant and as second class boiler attendant.

93. *Time and place of examination.*—Examinations shall be held at Karachi on the second Monday in the month of September.

94. *Postponement of examination.*—When a gazetted holiday falls on the date fixed for the examination, or when for any unforeseen reason an examination cannot be held on the date fixed for it, the Chief Inspector may fix some other day for holding the examination, which shall be duly notified, to the candidates for examination.

95. *Clerical assistance at examinations.*—Every examination shall be attended by one or more clerks from the Chief Inspector's office who shall do such clerical work as may be necessary and shall act as interpreter when required by the Board.

XIII.—Applications for Examination.

96. *Form of application.*—Every applicant for examination must make application in Form I prescribed in the Appendix. He shall fill in those parts of the form that are to be filled in by a candidate and either sign or mark his thumb impression, on the form in the presence of the Chief Inspector or a Magistrate or Justice of the Peace who shall append his signature in token of attestation.

97. *Lodging application.*—The applications must be lodged at the Office of the Chief Inspector not later than fifteen days before the date fixed for the examination and be accompanied by—

- (a) originals and copies of all testimonials;
 - (b) a receipt from a Government Treasury or the Reserve Bank of India situated in the Province of Sind for the amount of the fee prescribed hereunder for the examination at which the applicant wishes to appear;
- and

(c) any certificate granted to the applicant under these Rules or the Bombay Boiler Rules, 1924, or by an authority deemed competent under these Rules.

98. *Fees for examination.*—Candidates for examination for certificates of competency shall pay fees as follows:—

| | |
|---------------------------------------|-------------|
| Examination for 1st class certificate | ... Rs. 20. |
| Examination for 2nd class certificate | ... Rs. 15. |

99. *Remission of fee.*—Candidates once admitted to examination shall not be entitled to any remission of fees if they fail to pass or to proceed with the examination. Where a candidate is unavoidably absent from the examination on the date fixed the Chief Inspector may allow him a remission of the fee if applied for within one year of the date of payment.

100. *Fees of candidates found ineligible.*—Candidates found ineligible for any examination may apply for a refund of the fee within one year of the date of payment.

XIV.—*Testimonials.*

101. *Candidates must produce satisfactory testimonials.*—No applicant shall be admitted to examination who cannot produce satisfactory testimonials certifying to his experience, ability, sobriety and general good conduct for the whole period of his qualifying service. Breaks in the qualifying service period must be accounted for satisfactorily. Should a candidate allow more than one year to elapse between the end of the period covered by his last testimonial and the date of his application for examination he will not be allowed to sit for examination until he produces a testimonial for a further period of service of six months.

102. *Essential statements.*—Testimonials must clearly state the capacity in which the candidate was employed, whether as boiler attendant, head fireman, donkeyman or fireman and show the dates between which the candidate was so employed.

103. *Signature and countersignature.*—Testimonials must be signed by the engineer under whom the candidate was employed or, if not employed under an engineer, by the responsible person under whom he worked and must be countersigned by the mill manager or by the owner, agent or secretary of the mill or factory or workshop as the case may be.

104. *Railway service.*—Testimonials for service on railway locomotives must be signed by the responsible officer under whom the candidate served and be countersigned by the head of the department concerned.

105. *Sea service.*—Testimonials for service on steamships may be signed by the Chief Engineer and countersigned by the Master of the vessel or may be in the form of a seaman's discharge issued by a Shipping Master.

106. *Candidates for certificates of service.*—Testimonials of candidates for certificates of service under these Rules (*see* Rule 82) must comply with the requirements specified herein for testimonials of candidates for examination.

107. *Doubtful testimonials to be authenticated.*—In any case of doubt the Board may require a candidate's testimonials to be authenticated by the testimony of some credible person having personal knowledge of the facts required to be established.

108. *False testimonials.*—Where the Chief Inspector is satisfied that any testimonial tendered by a candidate is false he may by written order debar such candidate from being admitted to any subsequent examination held under these rules and if upon tender of such testimonial a candidate has already been admitted to examination he shall be deemed to have failed in such examination.

109. *Filing of copies and return of originals.*—Applications and copies of testimonials submitted by candidates shall be filed in the office of the Chief Inspector. The original testimonials shall be returned to the candidates at the close of the examination. Copies of testimonials shall be obtainable on payment of copying charges on application to the Chief Inspector.

XV.—Age and training.

110. *Age and training of second class candidates.*—A candidate for a certificate of competency as a boiler attendant of the second class must not be under twenty years of age and shall not be admitted to examination unless he proves to the satisfaction of the Board that he has served for not less than three years as a fireman or attendant on a steam boiler or as a driver on a combined steam engine and boiler.

111. *Age and training of first class candidates.*—A candidate for a certificate of competency as a boiler attendant of the first class must not be under twenty-five years of age and shall not be admitted to examination unless he possesses or is able to claim a certificate of competency of the second class or a certificate of service of the second class and in addition thereto—

(a) has served for not less than three years as a boiler attendant with a second class certificate of competency or of service in sole working charge of a boiler of Lancashire, Cornish, Water-tube or Marine type of not less than 300 square feet heating surface; or

- (b) has served for not less than three years as fireman serang on a battery of two or more boilers of Lancashire, Cornish, Water-tube or Marine type each of not less than 300 square feet heating surface; or
- (c) has served for not less than three years as a fireman serang or tindal on a steam ship with one or more boilers each of not less than 300 square feet heating surface.

112. *Service not in strict conformity with Rules.*—In any case in which the service of a candidate does not strictly comply with any one of the clauses specified under Rules 110 and 111 but is not less than the total period required under either Rule the Board of Examiners may accept such service on its merits as the Board may deem fit.

XVI.—*Examination Subjects.*

113. *Second class.*—To be entitled to a second class certificate of competency a candidate must satisfy the examiner that—

(a) he clearly understands—

- (i) the working and management of a steam boiler;
- (ii) the use and purpose of the various valves, cocks, mountings and fittings;
- (iii) the precautions to be taken and procedure to be observed before starting fires and when raising steam;
- (iv) the use of a feed pump and injector;
- (v) the use and purpose of a salinometer and thermometer;
- (vi) the need for periodical cleaning and pure water-supply and for the prevention of scale and other deposit on the heating surfaces;
- (vii) the need for periodical inspection of boilers and the manner in which they should be prepared for thorough inspection, hydraulic test and steam test;
- (viii) the precautions to be taken before entering or allowing another person to enter a boiler that is connected to another boiler under steam;
- (ix) the use of the best means of firing for the prevention of smoke;
- (x) the danger of water lodging in steam pipes and the precautions to be observed in draining;

(xi) the procedure to be followed in the event of shortness of water, bulging or fracture of furnaces or flat plates or bursting of tubes or of any accident to a boiler or steam pipe, and that—

(b) he is able—

- (i) to stoke a boiler, including cleaning and banking fires, in a workmanlike manner;
- (ii) to show how avoidable smoke may be prevented.
- (iii) to blow through and test correctness of water gauge glasses and test cocks;
- (iv) to replace a gauge glass and show how a false water level might be shown;
- (v) to ease a safety valve and use a blow down cock or valve;
- (vi) to adjust a high steam and low water safety valve and renew a fusible plug;
- (vii) to joint a manhole or handhole door or any cover or flange in the steam or feed pipes;
- (viii) to pack pump or valve chest glands;
- (ix) to grind and adjust cocks and valves;
- (x) to take a donkey pump or injector to pieces and replace in working order.

114. *First class.*—To be entitled to a first class certificate of competency a candidate must satisfy the examiner, in addition to the subjects prescribed for second class candidates, that he has at least a rudimentary knowledge of—

- (i) the principal elementary facts relating to combustion, heat and steam; and that he is able to some extent, to explain:—
- (ii) the principal causes and effects of corrosion and incrustation and the usual remedies employed;
- (iii) the object of the use of boiler fluids;
- (iv) the principles on which feed pumps and injectors work;
- (v) the principles on which appliances for the prevention of smoke work;
- (vi) the purpose of superheaters, economisers, feed heaters, feed filters, forced and induced draught appliances and mechanical stokers.

XVII.—Mode of Examination.

115. *Nature of examination.*—Every examination shall be of such a nature as to test the practical knowledge of the candidate and to ascertain his competency to manage a boiler or boilers.

116. *Examination in writing optional.*—The examination shall be conducted orally but any candidate may, if he desires, write his answers to such written questions as may be given to him by the examiner.

117. *Examination where held.*—The examination shall be held either in a factory, mill or workshop in which boilers are used or partly in such factory, mill or workshop and partly in the examination room.

118. *Practical test essential.*—Every candidate must demonstrate on an actual boiler or fitting or model his ability to perform any or all of the practical tests under Rule 113 (b).

119. *Hours of examination.*—Examinations shall be conducted in the examination room between the hours of 11 a.m. and 5 p.m. unless otherwise notified by the Chief Inspector and elsewhere at such time as the examiners may fix.

XVIII.—Grant of Certificates.

120. *Forms of certificates.*—Certificates of competency, exchange and service shall be in Forms II, III and IV in the appendix to these Rules.

121. *Surrender of lower grade certificate.*—No certificate of the first class shall be granted to the holder of a second class certificate after examination under these Rules unless and until he has surrendered to the Chief Inspector the certificate of the lower grade.

122. *Exchange certificate.*—An exchange certificate of competency shall be granted only in respect of and on production of a certificate issued after examination by a competent authority (Rule 81). The fact of the fresh certificate having been granted shall be endorsed on the original qualifying certificate before its return to the owner.

123. *Identification requirements.*—Every certificate granted under these Rules whether of competency, exchange or service shall bear a bust photograph of the holder, for which the candidate must sit after passing the examination or obtaining the Board's acceptance as the case may be, and his signature or thumb-impression and such other particulars as may be required for the purpose of identification.

The Chief Inspector's office shall arrange for the attendance of persons to be photographed. No extra charge shall be made to the candidates for the photographs.

124. *Duplicate of certificates recorded.*—Duplicates of all certificates granted to boiler attendants under these Rules shall be recorded in the Office of the Chief Inspector.

125. *Grant of duplicate certificates.*—Whenever any boiler attendant proves to the satisfaction of the Chief Inspector that he has, without fault on his part, lost or been deprived of any certificate granted to him under these Rules, or under the Bombay Boiler Rules, 1924, a duplicate of the certificate to which by the record so kept as aforesaid he appears to be entitled shall be furnished to him, which shall have for all purposes the same validity as the original certificate.

126. *Applications for duplicate certificates.*—Applications for duplicates of certificates under the preceding Rule shall be lodged with the Chief Inspector together with a declaration describing the lost certificate.

127. *Fee for duplicate certificates.*—Applicants for duplicates of certificates of any class or kind granted under these Rules or under the Bombay Boiler Rules, 1924, shall pay a fee of Rs. 10 for each certificate.

128. *Invalidity of original certificate.*—On the issue of a duplicate certificate the original certificate shall be deemed invalid and if found should be returned to the office of issue for cancellation.

XIX.—*Exchange Certificates.*

129. *Applications for exchange certificates.*—Applications under Rule 81 for certificates of competency corresponding to foreign certificates in the possession of the applicants shall be in Form I of the Appendix. Each applicant shall duly fill in the form which, together with the original foreign certificate in his possession and its copy and a receipt from a Government Treasury or the Reserve Bank of India in the Province of Sind for the amount of the fee prescribed below, shall be lodged with the Chief Inspector at least ten days before any meeting of the Board of Examiners.

Provided that, where the Chief Inspector is satisfied that delay in the issue of a certificate would cause hardship and is not due to the applicant's negligence, the Chief Inspector may receive such application at any other time. In such case the Chief Inspector shall refer the application to at least two members of the Board of Examiners and, on receipt of their signature to the certificate shall deliver the certificate to the applicant after the usual process of identification has been carried out.

130. *Fee for exchange certificates.*—Applicants for certificates of competency in exchange shall pay a fee of Rs. 10 for each certificate irrespective of class.

XX.—*Certificates of Service.*

131. *Applications for certificates of service.*—Applications under Rule 82 for certificates of service shall be in Form I of the Appendix. Each applicant shall duly fill in the form which, together

with his testimonials and their copies and a receipt from a Government Treasury or the Reserve Bank of India in the Province of Sind for the amount of the fee prescribed below, shall be lodged with the Chief Inspector at least ten days before any meeting of the Board of Examiners.

The proviso to Rule 129 shall also be applicable to this Rule.

132. *Candidates' practical skill may be tested.*—If on scrutiny of the testimonials of an applicant for a certificate of service under Rule 82, the Board of Examiners has doubts about the competence of the applicant for the charge and management of a boiler, or if it is necessary to determine the class of certificate for which he is qualified, the Board of Examiners may subject the applicant to such practical examination as it deems fit.

133. *Fee for certificate of service.*—Applicants for certificates of service shall pay a fee of Rs. 10 for each certificate irrespective of class.

Provided that any fee so paid by an applicant who is found to be ineligible for the grant of a certificate by reason of the insufficiency of his testimonials of previous service, may, if applied for within one year of the date of payment, be returned to him in full.

XXI.—Penalties.

134. *Penalties.*—The owner of any boiler liable to inspection under the Act who shall—

(a) work the same or permit the same to be worked at any time, except whilst he has in his employ in immediate attendance and charge for the purpose of attending to the working of the boiler a fit and proper person to be in attendance and charge thereof;

and any such person in charge or any other person who shall—

(b) work the same or permit or cause it to be worked in contravention of Section IX of these Rules; shall be punishable with fine which may extend to one hundred rupees for each offence and in the case of a continuing offence with an additional fine which may extend to one hundred rupees for each day after the first day in regard to which he is convicted of having persisted in the offence.

135. *Cognisance of offences.*—All offences against these Rules shall be cognisable by a Magistrate of the first class.

136. *Limitation and previous sanction for prosecution.*—No charge shall be brought against any person of any offence punishable under these Rules except within six months from the date of the commission of the offence and no prosecution shall be instituted without the previous sanction of the Chief Inspector.

FORM B.

INDIAN BOILERS ACT, 1923 (ACT V OF 1923).

Notice for Examination of a Boiler under Sections 7 and 8.

(Rule 34.)

No. of 19

SIND BOILER INSPECTION OFFICE,

Dated Karachi, the 19

To

Dear Sir,

In reply to your application dated _____ you are hereby informed that Boiler Registry No. _____ at the abovenamed premises will be thoroughly examined hydraulically tested by the Government Inspector on the _____

To enable the examination to be made, you are bound—

- (a) to afford to the Inspector all reasonable facilities for the examination and all such information as may reasonably be required of you;
- (b) to have the boiler properly prepared and ready for examination in the prescribed manner; and
- (c) in the case of an application for the registration of a boiler, to provide such drawings, specifications, certificates and other particulars as may be prescribed

Voucher No. _____ in acknowledgment of Bank Treasury accompanes
 Receipt No. _____ for Rs. _____

Yours faithfully,

Chief Inspector of Boilers,

(See reverse for preparation required.)

[Reverse of Form B.]

PREPARATION FOR EXAMINATION.

See Part II, Chapter I, of the Regulations.

(Regulation 150.)

(A) Preparation for Inspection.

At every examination of a boiler for the grant or renewal of a certificate, the boiler shall be empty and thoroughly clean in all its parts. All doors of manholes, handholes and sightholes and cleaning plugs and all caps in the headers and mud-drums of water tube boilers, all firebars, bearers, front plates, bridge plates, firebridges, brick arches, oil fuel burners and mechanical stoker fittings shall be removed. All valves and cocks comprising the boiler mountings shall be opened up and taken apart and the valves or cocks ground, when necessary, before the Inspector's visit.

Provision shall, if required by the Inspector, be made for the removal of lagging or brickwork or other concealing part and for the drilling of plates and for verifying the pressure gauge and safety valve dimensions and weights. All smoke tubes, exterior or water tubes, smoke-boxes, and external flues shall be swept clean.

Provision shall be made for the effective disconnection of all steam and hot water communication with any other boiler under steam, as prescribed in Part III of the Regulations. This shall be effected either by the removal of a length of pipe from the steam and feed piping or by the insertion of substantial blank flanges. Where blank flanges are employed, they shall be inserted between the flange of the chest and the pipe attached to it. No blank flange shall be inserted between a safety valve chest and the boiler.

NOTE.—These provisions as to effective disconnection shall extend to every case wherein a person is sent or with the assent of the owner or person in charge goes into a boiler for any purpose. See Part III of the Regulations.

(Regulation 152.)

(B) Preparation for Hydraulic Test.

The chests of all mountings subject to steam pressure shall be in place and shut tight or blank flanged. The safety valves shall either be jammed down or removed and the chest-opening blank-flanged. The attachment* for the Inspector's pressure gauge and the nipple† for connecting the Inspector's test pump hose shall be in order. All doors shall be properly jointed and tightened up. The boiler shall be completely filled with water, care being taken to allow all air to escape and, if possible a preliminary test not exceeding the working pressure of the boiler shall be taken before the Inspector's visit to test the tightness of the joints. When a boiler is hydraulically tested for the first time, it shall be entirely cleared of lagging or brickwork; at subsequent tests the lagging or brickwork or portions thereof, shall be removed if required by the Inspector.

Preparation Now Required. (A), (B).

NOTE.—The last certificate for the boiler should be shown to the Inspector.

*Tapped $\frac{1}{2}$ " Whitworth bolt and nut thread.

†Tapped $\frac{1}{4}$ " Whitworth bolt and nut thread.

FORM C.

(See Rule 8.)

GENERAL WORKING OF BOILERS.

Instructions to Boiler Attendants.

These instructions should be frequently and carefully studied, with a view to keeping in mind the precautions to be observed, and the ordinary procedure to be followed in the safe working of boilers.

Precautions before starting the Fires.

Before starting the fires in a boiler, the attendant should:—

- (1) see that there is sufficient water in the boiler and that the gauge cocks are working freely;
- (2) ease safety valves, or open cock on top of boiler to allow air to escape;
- (3) see that the blow-off cock is fully closed and tight;
- (4) see that the safety valves and feed check valve are free and workable;
- (5) see that water is not leaking from any part of the boiler;
- (6) note if the pressure gauge pointer is at zero;
- (7) see that the feed pump is in working order.

He must not rely on the supposition that the water he has previously put in is still in the boiler, as it may have run out without his knowledge through a leak or open cock, nor can he be sure that the gauge glass shows the true water level until he has tested it. This is done in the following manner; shut off the lower gauge cock and empty the glass by the drain cock; then shut the drain cock and open the gauge cock; if everything is in order, the water will then rise in the glass to the same height as before.

Raising steam.—In getting up steam in all types of boilers the operation should be as gradual as circumstances will allow. Nothing turns a new boiler into an old one sooner than getting up steam too quickly. Forcing the fires when starting work is liable to cause straining of the seams and tubes of the boiler. In the case of large boilers generally, steam should not be got up in less than six hours. Before getting up steam, the water level should be observed, to ensure that water is at the proper height in the glass, the pressure gauge noted, and the safety valves tried to see they are free. The blow-off cock should be examined to see that it is completely shut and tight.

Pressure gauge.—The pressure or steam gauge should be kept in order, and be in such a position as to be easily seen by the boiler attendant. There should be a plain mark on it showing the highest pressure allowed for the boiler, and the dial should be kept clean so that the figures may easily be read.

Steam pressure.—Ordinarily the safety valve will prevent the steam from rising much above the working pressure, but if the steam gauge shows so rapid an increase of pressure as to indicate danger of exceeding the highest limit, water should be immediately fed into the boiler and the dampers partially closed in order to diminish the effect of the fire. If, however, the water has fallen so low that there is danger of an accident from this cause, the fires should be withdrawn before feeding in water, the safety valves eased, and if the engine is at rest it should be started so as to reduce the pressure.

~~The safety valves are provided to guard against over pressure.~~

~~They should be moved by hand every day so as to prevent them from sticking. If moved only occasionally, they are liable to leak.~~

The valve can be tested by slowly raising it a little, and when let down, it should close perfectly tight. It should never be opened by a sudden knock or pull. If it does not close tight turn it on its seat until it fits, or when its construction does not permit this, raise it slowly a few times and let it down again, but on no account must the valve be screwed down further or loaded more than what has been allowed by the Inspector.

Safety valves must never be overloaded, and spring valves should have ferrules or other provision against the valves being screwed down too far. In case of an accident resulting from wilful overloading the culprit might be held criminally responsible at the official inquiry or inquest.

Low water safety valves.—If there is a low water safety valve, test it occasionally by lowering the water level to see that the valve begins to blow at the right point. It should give warning "before" the water level has sunk too low, and before damage can be done. When the boiler is opened, examine the floats and lever and see that they are free and that they give the valve the full rise. With the ordinary type of high-steam and low water safety valve the float should be down at its lowest position and the valve full open when the boiler is empty.

The water gauges.—These will be kept in best order by frequently blowing through. The cocks are thus kept in good working condition without leaking. Blow through the drain cock at the bottom of the gauge, and shut and open the steam and water cocks every few hours. These cocks should be blown through more frequently when the water is dirty. Should either of the passages become choked, or whenever the water in the gauge glass moves sluggishly the passages must be cleaned. This is best done with a wire. The gauge glass is so arranged that its top cock connects with the steam space and its bottom cock is below the water line. The water line will ordinarily be near the middle of the glass tube. Always test the glass water gauges thoroughly the first thing in the morning and at the commencement of every shift. This is done by first opening the drain cock and then shutting the upper cock which should give water; the upper cock should then be opened and the bottom cock closed—which should give steam; during this test the drain cock should be kept open.

If water and steam do not appear in proper order the cocks are choked and the passages should be cleaned. To lessen the risk of breaking the gauge glass the water cock should always be reopened after the steam cock.

Gauge glasses with a narrow white stripe running the whole length of the glass on the side next the boiler are recommended as they show the water line more clearly, especially when the water is dirty.

The Indian boiler regulations framed by the Central Boilers Board require every water gauge glass to be fitted with a guard to prevent injury to the attendants. See that it is always in place and clean, when there is steam in the boiler.

Special Note.—It does not follow that there is plenty of water in the boiler because there is plenty of water in the gauge glass. The passages may be choked, and empty gauge glasses are sometimes mistaken for full ones, and explosions have resulted therefrom. Hence the importance of keeping the gauge cocks perfectly tight and clean and of blowing through the test cocks frequently.

A large number of accidents have been due to inoperative water gauges, and to negligence of the attendant in not carefully reading the water level.

The Blow-off Cock.—The Blow-off should be used daily if the water is at all dirty or sedimentary, especially with Locomotive type and Vertical Boilers, as their narrow water spaces are liable to get choked with mud, which soon hardens into a solid mass.

The amount of water to be blown out depends on the size of the boiler and can be determined only from experience. When blowing out, the best result is obtained if the water has been at rest for some time (say before the engine is started) thus giving the sediment time to settle; if the feed water is clean merely turn the cock round.

The Scum Cock.—When scum cocks are fitted, if the feed water is dirty, a little should be blown off daily; if the water is clean, merely turn the cock round. Before opening the scum cock, see that the water is at the height indicated by the water-level pointer, otherwise the scumming will be ineffective. Water should be blown from the surface through the scum cock when steam is being drawn off, i.e., when the engine or other machinery is working.

Manhole and other Door Joints.—When making such joints the jointing materials should never be of round-sectioned packing. Care must be taken that the spigot of the door is centrally placed in the hole, as many accidents have resulted from packing being blown out between the spigot and side of hole, even when the clearance was only $\frac{1}{8}$ th of an inch. The nuts must be carefully and evenly tightened. Further tightening should be made during the process of heating up the boiler when raising steam.

Steam pipes.—When properly arranged, should give no trouble. Frequently, however, they are so designed as to contain pockets, in which, while out of use, condensed steam accumulates. Such water is exceedingly dangerous and great care should be taken to see that the pipes are properly drained *before the stop-valve is opened* otherwise "water hammer" will take place even with the best designed steam pipes, and disastrous explosions, causing loss of life and property may occur.

Scale and Grease.—Roughly speaking, scale offers a hundred times as much resistance to the passage of heat as does a similar thickness of steel or iron. A half-inch furnace plate covered with ~~1/16th~~ $\frac{1}{16}$ th inch scale is as efficient a heat retarder as a steel furnace 10 inches thick. Grease is about ten times worse than scale. In a boiler at work the temperature of a clean furnace plate is only slightly in excess of that of the water in the boiler; but if scale or grease is interposed between the water and the plate, the latter acquires a temperature more nearly approximately that of the flame with which it is in contact. If the fire is fierce (artificial draught) the furnace tube may grow so hot that it elongates considerably. If in addition, cold air is admitted during each firing, a concertina action of the furnace takes place, which is one of the worst causes of boiler wear and tear.

~~Wear and Tear~~.—Can be reduced and the life of a boiler prolonged if scale and grease are prevented from accumulating in a boiler. The combined effects of scale or grease and artificial draught are disastrous. Scale or grease also causes waste of fuel.

~~Grease~~.—A mixture of sedimentary water, soda, and grease produces an adhesive scum. Where this is suspected, the water level should never be lowered below the furnace top unless the boiler is afterwards entered and this scum cleaned off the furnace plate before firing again.

~~Scale Removal~~.—The customary method is not a satisfactory one. The boiler is emptied and then cooled down by opening all the manholes, and the result is that the scale, which would otherwise be soft, hardens through contact with the air, and requires laborious chipping off.

A very effective, but slower method, is to retain the water in the boiler until cool, and not to run it out until the men are ready to enter the boiler with water hose, brushes and scrapers. The scale will then be soft and easily removable.

If time is a consideration, the cooling can be accelerated by adding cold feed to the hot water in the boiler and slowly running off the cooled water. Another method is to blow off the boiler with the lowest possible pressure (not more than 20 lbs.) and to keep it closed until cold. The scale will then be easily removed.

~~Treatment of Feed water~~.—Many feed waters require soda or other chemicals to arrest corrosion or to change the nature of the scale.

There is *no harmless chemical* which will remove scale or sediment when it has once got into the boiler and the only effective process is to purify the feed water before it enters the boiler. By this means, the sediment, and generally, too, the added chemicals, can be deposited in tanks or in filters, and therefore never goes into the boiler. Excepting when the water obtainable is very good, water-purifying apparatus ought to pay any boiler owner, particularly at those works where three or more boilers are in constant work. Boiler owners wishing to have definite advice as to the best treatment of their feed water should have it analysed at some Chemical Laboratory and ascertain the best treatment in the particular circumstances.

Special attention is drawn to the not infrequent but *very bad* practice of allowing the waste steam from the Engine Cylinders or Pumps to be drained into the boiler Feed Water Tanks. The waste steam from cylinders is always mixed with a certain amount of oily matter, which will be deposited in the feed water tanks and ultimately be pumped into the boiler, with possibly disastrous results, as it will be obvious to every careful boiler attendant that should the oil be deposited on the furnace crowns, they may become over-heated and collapse.

It should be the first care of the Boiler Owner, and the Boiler Attendant to see that the feed water is kept as pure as possible. Impure feed water means additional expense on the upkeep of the boiler.

Preservation of Boilers when not in use.—Steam boilers when not in use are liable to deterioration from corrosion, and, unless well cared for and made rust-proof, they may depreciate more rapidly than when in use. They should be thoroughly drained and thoroughly dried and all valves, cocks and openings closed so as to exclude moisture. Another plan is to fill the boiler with water to which about 1/100 per cent. caustic soda has been added.

Special Instruction for Boiler No.

This boiler should be opened up and thoroughly cleaned after a period of work which should not exceed.....
A record of such cleanings should be maintained and produced when required by the Inspector.

Dated

Chief Inspector of Boilers.

APPENDIX TO PART II OF THE SIND BOILER RULES, 1941.

FORM I.

(See Rules 96, 129 and 131.)

INDIAN BOILERS ACT, 1923 (ACT V OF 1923).

Application for a Boiler Attendant's Certificate of Competency or of Exchange or of Service.

Name, etc., of Applicant.

| | | |
|---|-------------------|---------------|
| A | Name in full | |
| | Permanent address | |
| | Place of birth | Date of birth |

Particulars of all previous certificates (if any).

| B | Number of certificate | Proficiency, Competency, Exchange or Service | Grade | Where issued | Date of issue | If at any time suspended or cancelled, state by what Court or Authority | Date | Cause |
|---|-----------------------|--|-------|--------------|---------------|---|------|-------|
| | | | | | | | | |
| | | | | | | | | |

Certificate now required.

| C | Grade | Competency, Exchange or Service. | Address to which certificate may be sent |
|---|-------|----------------------------------|--|
| | | | |

Statement of previous failures (if any).

If applicant has failed in a previous examination for the certificate now required, he must here state the date and place of each examination in which he has failed. If he has not failed, he must state so in writing across this division.

| D | Date of examination | Place of examination | Subject in which he failed |
|---|---------------------|----------------------|----------------------------|
| | | | |

Certificate of Examiners.

Examination. Certified that _____ has been examined for a certificate of competency as Boiler Attendant of the _____ class at _____ this day of _____ 19____, and has satisfied us of his fitness to hold a certificate of the FIRST, SECOND CLASS. He has therefore PASSED, FAILED.

G

Exchange. Certified that _____ has produced before us at _____ this day of _____ 19____, a certificate of competency proficiency of the _____ class as _____ and we are of opinion that he should be granted a certificate of competency of the FIRST, SECOND CLASS in exchange.

Service.

Certified that _____ has produced before us at _____ this day of _____ 19____ satisfactory testimonials _____ covering the required period of service and we are of opinion that he should be granted a certificate of service of the FIRST, SECOND CLASS.

Personal description of Applicant.

H

Nationality _____
 Religion or caste _____
 Height _____ ft. _____ ins. Complexion _____
 Colour of hair _____ ; eyes _____
 Personal marks of peculiarties _____

Board of Examiners }

To Chief Inspector.

Date _____

Office.

Certificate No. _____ of the _____ class issued
 and duplicate recorded on _____ 19____

Chief Inspector.

1731

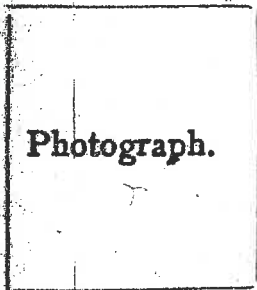
Appendix to Part II of the Sind Boiler Rules, 1941.

FORM II.

Form of Certificate of Competency to be granted under Rule 120.

SIND BOILER RULES, 1941.

Certificate No. of 194



*Certificate of Competency as First Class or
Second Class Boiler Attendant.*

To

Having satisfied us of your competency to fulfil the duties of
Class Boiler Attendant in accordance with the Rules
now in force we do hereby, in pursuance of the said Rules, namely,
THE SIND BOILER RULES, 1941, grant you this certificate of
competency of the Class.

By order of His Excellency the Governor of Sind.

Board of Examiners

Karachi.

This day of 194

[Reverse of Form II.]

CERTIFICATE NO. 194

Signature of Owner

Date and Place of Birth

Address of Owner

Personal description

Nationality

Religion or Caste

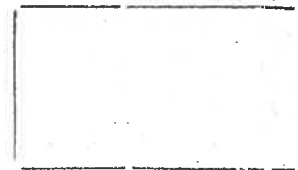
Height without shoes

Complexion

Colour of hair ; eyes

Marks or peculiarities

Thumb impression.



Certificate No. issued under my signature this day of 194

This certificate is given upon an Ordinary Examination passed at on the day of 194

Karachi.

Date of issue 194

Chief Inspector.

N.B.—Any person other than the owner hereof becoming possessed of this Certificate should transmit it forthwith to the office of Issue.

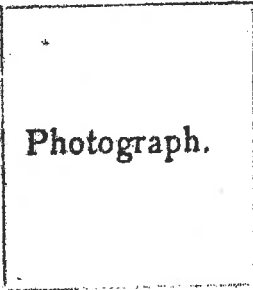
Appendix to Part II of the Sind Boiler Rules, 1941.

FORM III.

Form of Certificate of Competency to be granted under Rule 120.

SIND BOILER RULES, 1941.

Certificate No. of 194



*Certificate of Competency as First Class or
Second Class Boiler Attendant.*

To

Having produced before us a Certificate of Proficiency as
Competency

Class issued to you by

on

we do hereby, in pursuance

of the SIND BOILER RULES, 1941, grant you this Certificate

of Competency of the

Class in exchange.

By order of His Excellency the Governor of Sind.

Board of Examiners }

Karachi.

This

day of

194

[Reverse of Form III.]

CERTIFICATE NO. 19

Signature of Owner

Date and Place of Birth

Address of Owner

Personal description

Nationality

Religion or Caste

Height without shoes

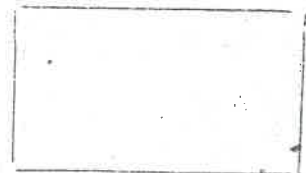
Complexion

Colour of hair

; eyes

Marks or peculiarities

Thumb impression.



Certificate No. issued under my signature this
 day of 19

This certificate is given upon production of Certificate of
Proficiency No. issued at after examination
Competency

on the day of 194

Chief Inspector.

Karachi.

Date of issue 194

N.B.—Any person other than the owner hereof becoming possessed of this
 Certificate should transmit it forthwith to the office of Issue.

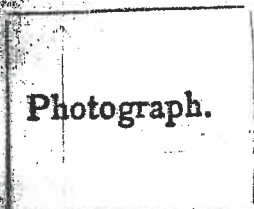
Appendix to Part II of the Sind Boiler Rules, 1941.

FORM IV.

Form of Certificate of Service to be granted under Rule 120.

SIND BOILER RULES, 1941.

Certificate No. of 194



Certificate of Service as First Class (or Second Class) Boiler Attendant.

To

Having satisfied us that you have served for the period required in accordance with the Sind Boiler Rules, 1941, prior to the coming into force of the Bombay Boiler Rules, 1924, and being of opinion that you are possessed of competent practical skill, we hereby, in pursuance of the said Rules, grant you this Certificate of Service of the Class.

By order of His Excellency the Governor of Sind.

Board of Examiners

Karachi.

This day of 194

[Reverse of Form IV.]

CERTIFICATE NO.

Signature of Owner

Date and Place of Birth

Address of Owner

Personal description

Nationality

Religion or Caste

Height without shoes

Complexion

Colour of hair ; eyes

Marks or peculiarities

Thumb impression.



Certificate No. issued under my signature this day of 194

This certificate is given upon production of satisfactory testimonials of service in accordance with Rule 82 of the Sind Boiler Rules, 1941.

Chief Inspector.

Date of issue 194

N.B.—Any person other than the owner hereof becoming possessed of this Certificate should transmit it forthwith to the office of Issue.

6

DC

1943

DC

1943