## FACTORY LABOURTIN THE PUNJAB

# Factory Labour in the Punjab 

BY

AHMAD MUKHTAR, M.A., Ph.D. Econ. (London);<br>University Professor and Chairman Board of Studies in Economics, Annamalai<br>University, Annamalainagar, Chidambaram; Member, International<br>Industrial Relations Association; Sometime University Lecturer<br>in Economics, Aligarh Muslim University, Professor of<br>History and Economies, Gordon College,<br>Rawalpindi, Industrial<br>Investigator, Punjab;<br>etc. etc.

WITH A FOREWORD BT
SIF EDWARD MACLAGAN, K.C.S.I., K.C.I.E.
Late Governor of the Punjab

THE HUXLEY PRESS, MADRAS

# Thesis approved for the Degree of Doctor of Philosophy in the Faculty of Economics, University of London 

## CONTENTS

OHAP. Page
Preface ..... vii
Foreword .. ix
I. Introductory .....  1
II. Factory-labour legislation in India ..... 9
III. The Factory-Labourer ..... 35
IV. Factories at Work ..... 80
V. Housing, Health and Home-life ..... 119
VI. The Supply of and Demand for Labour ..... 134
VII. Accidents and Compensation ..... 146
VIII Trade-Unionism ..... 164
IX. Retrospect and Prospect ..... 175
APPENDIX A.-Statement of Wages ..... 191
n B.-Questionnaire for Family-budgets. ..... 199
$n$ C.-Questionnaire for Factory-owners. ..... 202
General Index ..... 205

## LIST OF ILLUSTRATIONS

| Carpet-weavers at work | ... | ... | Fro | spiece |
| :---: | :---: | :---: | :---: | :---: |
| Children in carpet-factories | ... | .. | ... | 22 (8) |
| Carpet-weavers | ... | ... | ... | 32 (a) |
| Master-weavers | ... | ... | ... | 46 (a) |
| The Gin woman | ... | ... | ... | 84 (a) |
| The Factory-labourer | ... | ... | ... | 98 (a) |
| The Beggar ... | ... | ... | ... | 136 (8) |

## PREFACE

An attempt is made in the following pages to study the economic condition of the factory-labourer in the Punjab. The ever-growing industrial unrest in the province has absorbed the attention of many and it is time that we should take stock of our economic position with a view to make or suggest further advances. Much of the material that appears in this book is based mainly on my personal investigations which I carried out both as an Industrial Investigator in the Punjab and as University Lecturer in Economics at Aligarh.

The book was submitted as a thesis for the $\mathrm{Ph} . \mathrm{D}$. degree of the London University in June, 1928, and is now published with a few alterations here and there. The pressure of University work and the preparation of a more comprehensive volume on Indian factory-labour have not enabled me to bring it up-to-date.

I take this opportunity to express my gratitude to Mr. A. C. Subrahmanyam, Tutor in English, Annamalai University, who helped me considerably in reading the proofs and to Mr. P. K. Mahadevan, Tutor in Economics, Annamalai University, in taking upon himself the entire responsibility of preparing the index. Their work has been of the greatest value to me and, I hope, not valueless to them. I am also thankful to Dr. Gilbert Slater for taking a keen interest in this work and to Sir Edward Maclagan for adding a foreword to it. Last, but not the least, I am grateful to Sir Richard Burn, Sir John Maynard and Mrs. V. Anstey who carefully read the manuscript and helped me with many valuable suggestions.
$\left.\begin{array}{c}\text { Annamalainagar, } \\ \text { Annamalai University, } \\ \text { December, } 1929 .\end{array}\right\}$

Ahmad Mukhtar.

## FOREWORD

IN 1919 the Government of the Punjab appointed a Board of Economic Enquiry to serve as a centre for economic study and research outside the ordinary official channels. One of the happy results of this step was the selection by the Board of a few of the more promising local students of Economics to investigate economic problems in the province, and among the young men so selected in 1920 was Mr. Ahmad Mukhtar, the writer of the following thesis. Both as an Industrial Investigator under the Board, and subsequently as a teacher in the Aligarh University, he has kept himself abreast of economic problems in Northern India and has paid special attention to questions relating to industrial labour, supplementing his theoretical studies by frequent local and personal investigations, which give additional value to the opinions which he formulates.

The Punjab is not an industrial area and, so far as industrial legislation is concerned, development has hitherto followed the lines adopted for India at large and has been based on considerations which are common to India generally. The writer has accordingly examined the history of factory legislation in India and, in doing so, has taken the opportunity to dispel, on historical grounds, the common allegation that factory legislation in India was originally prompted, not by motives of humanity, but by the machinations of Manchester rivals. The treatise he has written is not polemical and there is much in what he says that makes one hope that, in the Punjab at least, the welfare of the factory population may be substantially advanced without the importation of political controversy. In the big strike of 1920, it was pitiful to see how the economic issues were obscured by the political and how the inevitable hardships endured by the strikers were prolonged by the encouragement of partisans who had quite other ends in view. The air has cooled since then, and it is to be hoped that the Ministers and the Legislators, with whom the supervision of industrial progress now rests,
will be able to enhance the welfare of the industrial classes without regard to extraneous considerations.

Their task will not in any case be an easy one. The problems dealt with in this treatise are not such as can be settled off-hand. The writer has, however, put forward in a thoroughly scholarly manner the historical basis and the economic data necessary for those who wish to approach the subject, and his own experiences and opinions provide food for earnest thought. The tentative legislation of 1881, 1891 and 1911 has been rapidly outclassed by the important measures of the last few years. We have now to cope not only with advanced opinion in Great Britain, but also with international pressure which is brought to bear on Great Britain and on India alike. Steps, which a few years ago seemed fanciful or ridiculous, are now accepted as essential, and still further proposals are put before us as ideals to which we shall soon attain. The enthusiast does not indeed have it all his own way. He has, of course, the financial interest, real and fancied, of the employers to contend with and he is confronted with the apathy of the official and comfortable classes-obstacles which tend to justify him in the discreet use of a certain amount of calculated exaggeration. At the same time, the industrial reformer is dealing with problems which cannot be isolated and which form part of issues extending far beyond the industrial sphere. Much that is emphasized in Mr. Ahmad Mukhtar's treatise-the importance of the inspecting staff, the bribery and oppression of the employers, the apathy and irregularity of the workmen, their illiteracy, their early marriages, their infant mortality, their insanitary surroundings and so forth-so far as it is true of the factory population, is equally, or almost equally, true of the population at large outside the factories. The problems, therefore, are in their essence much larger than mere factory problems. At the same time, the enthusiast can contend, and rightly contend, that the factories, while representing an epitome of the outside population, present a far more tangible and manageable field for experiment and for reform than the population at large, and indeed offer an opportunity for improvements which may, to some degree, influence the progress of the general community. As Mr. Ahmad Mukhtar has said in his
treatise, the three main obstacles with which we have to contend are poverty, disease and ignorance; and the contest against these, which may well enough appear hopeless in the country at large, becomes a more practicable proposition when we concentrate our efforts on the factory population.

Many of the points dealt with in the thesis are of a technical character and demand the consideration of experts. Many of the remedies suggested are such as would, a few years ago, have been looked on as startling. In some few cases, they may still be looked on as premature; but they have in every case been carefully thought out and are based on practical and sympathetic observation. The Punjab has been late in entering the industrial world and late in turning its attention to industrial problems; but it benefits from its opportunities of observing the development and the mistakes of other tracts and other countries, and it is not impossible, as indicated by Lord Chelmsford in his speech of 1920 which Mr. Abmad Mukhtar has quoted, that the new start being made by India should in some respects at least be abreast of the most advanced European countries. If the treatise below can be utilized as providing the basis for a real advance in factory conditions, there is no reason why the Punjab should not become a model to other areas in the sphere so competently dealt with by the Author of the thesis.

[^0]E. D. Maclagan



Carpet weavers at work
"No reform has yet been made in the sitting posture of the craftsmen while at work, although some means in this direction can be effectively employed ". (Page 32).

## APPENDIX A. ${ }^{\text { }}$

Statement of wages in some Punjab factories as collected by the Author in his tour:Factory A.

1. Engineer (1st class)
2. Engineer (2nd class)
3. Engine Drivers
4. Fitters

5 Firemen
6. Oilmen
7. Carpenters
8. Blatksniths Factory $B$.

1. Ordinary unskilled labour
2. Skilled Labour
3. Worker on Shaving Machine
4. Worker on Splitting Machine Factory $\mathbf{0}$.
5. Oilmen
6. Ironsmiths
7. Engineer (2nd class)
8. Firemen
9. Khanchiman - (centrifagal)
10. Fitters
11. Sievemen
12. Ordinary unskilled labourers Factory D.
13. Engineeer (2nd class)
14. Engine Driver
15. Fitter
16. Firemen
17. Oilmen
18. Carpenter
19. Mochi (Cobbler)
20. Chowkidar
21. Opener or Press Coolies
22. Coolie (woman on gins)

Factory $\mathbf{E}$.

1. Engineer (2nd class)
2. Engine Driver
3. Fitter
4. Fireman
5. Oilman
6. Carpenter
7. Blacksmith
8. Mochi
9. Chowkidar
10. Opener or Press Coolies
11. Coolie (woman on gins) Factory $\mathbf{F}$.
12. Engineer (1st class)
13. Engineer (2nd class)
14. Engine Drivers
15. Fitters

Rs. 275, Rs. 125 and Rs. 110 p.ms
Rs. 145 p.m.
Rs. 65 and Rs. 55 p.m.
Ranging between Rs. 52 and, Rs. 110 p.m.
Ranging between Re. 1-1 and Re. 1-10 per day.
Re. 1 per day.
Re. 1-14 per day. Re. 1-8 and Rs. 2-9 per day.

Rs. 18 to Rs. 22 p.m.
Rs. 25 to Rs. 30 p.m.
Rs. 38 p.m.
Rs. 75 p.m.
Rs. 20 p.m.
Rs. 50 do.
Rs. 135 do.
Rs. 32 do.
Rs. 22 to Rs. 27 do. Rs. 22 do. Rs. 18 do.
Re. 0-12-0 daily.
Rs. 115 p.m.
Rs. 45 do.
Rs. 64 do.
Rs. 40 do.
Rs. 22 do.
Rs. 37 do.
Rs. 35 do.
Rs. 18 do.
Re. $1-4$ per day
As. 7 do.
Rs. 150 p.m.
Rs. 50 do.
Rs. 90 do.
Rs. 40 do.
Rs. 30 do.
Rs. 50 do.
Rs. 40 do.
Rs. 50 do.
Rs. 20 do.
Re. 1 per day
As. 6 per day
Rs. 195 p.m.
As. 50 do.
Rs. 35 to Rs. 60 do.
Rs. 30 to Rs. 60 do.
5. Firemen
6. Oilmen
7. Carpenters
8. Blacksmith
9. Mochi
10. Weaver
11. Spinner
12. Dyer
13. Chowhidar
14. Opener or Press Coolies Factory G.

1. Engine Driver
2. Fitter
3. Fireman
4. Oilman
5. Carpenter
6. Blacksmith
7. Mochi
8. Press Distributor
9. Press Compositor
10. Chowkidar
11. Opener or Press Coolie Factory $\mathbf{H}$.
12. Fngineer (2nd class)
13. Engine Driver
14. Fitter
15. Fireman
16. Oilman
17. Mochi
18. Chowkidar Factory 1
19. Engineer (2nd class)
20. Engine Driver
21. Fitter
22. Fireman
23. Oilman
24. Carpenter
25. Chowkidar

Factory J.

1. Niller
2. Engineer
3. Head Fitter
4. Fitters
5. Spoutman
6. Mistri
7. Whirl Scourer
8. Rulemen
9. Parifier Room
10. Cleaner
11. Carpenter

## Factory K

1. Engineer (2nd class)
2. Engine Driver

Rs. 24 to R3. 35 p.m.
Rs. 20 to Rs. 35 do.
Rs. 25 to Rs. 40 do.
Rs. 35 to Rs. 55 do.
Rs. 25 to Rs. 35 do.
Rs. 35 to Rs. 60 do-
Rs. 20 to Rs. 28 do.
Rs. 19 to Rs. 24 do-
Rs. $15-8$ to Rs. 23 do.
As. 10-6 to As. 13.6 per day
Rs. 70 and Rs. 45 p.m.
Rs. 50 do-
Rs. 38 do.
Rs. 20 do-
Rs. 40 do.
Rs. 60 do.
Rs. 53 do.
Rs. 40 do.
Rs. 30 to Rs. 47 do.
Rs. 19 do.
Rs. 15 to Rs. 18 do.
Rs. 90 do
Rs- 35 do.
Rs. 50 do.
Rs. 35 do.
Rs. 18 do.
Rs. 35 do.
Rs. 20 do.
Rs. 150 do.
Rs. 110 do.
Rs. 35 do.
Rs. 30 do.
Rs. 60 do.
Rs. 45 do.
Rs. 16 do.
Rs. 350 p.m-
Rs. 150 do-
Rs. 107 do-
Rs. 51 do.
Rs. 20-8 do-
Rs. 120 do-
Rs. 19 do-
Rs. 27 do-
Rs. 18 do-
Rs. 19 do-
Rs. 88 do-
Rs. 150 do.
Rs. 40 do-
3. Fitter
4. Fireman
5. Carpenter
6. Blacksmith
7. Chowkidar

Rs. 25 p.m.
Rs. 33 do.
Rs. 60 do.
Rs. $50^{\circ}$ do.
Rs. 16 do.

## Factory L.

1. Leading Fitters (Mistris)
2. Fitters
3. Apprentice Fitters (Europeans)
4. Apprentice Fitters (Indians)
5. Tarners
6. Drillers
7. Slotters, Planers.
8. Shapers
9. Masons
10. Trimmers and Belters

Minimum Rs. as.

Maximum
11. Oilmen $\begin{array}{ll}3 & 0 \\ 1 & 4\end{array}$ per day Rs. as.
58 28
2. Drivers 014

18
13. Firemen
14. Mill Wrightmen
15. Blacksmiths
16. Hammermen
17. Carpenters
18. Painters
19. Batterymen
20. Coolies
21. Coolie Jamadars
22. Moulders
23. Core-Makers
24. Fettlers
25. Tuyer Cleaners
26. Chowkidars
27. Cbowkidar Jamadars

Rs. 15 p.m. to Rs. 20 p.m.

## Factory M.

1. Engineer (2nd class)
2. Shift Chargeman
3. Boiler House Chargeman
4. Engine-Driver
5. Fitter
6. Fireman
$7 . \quad "$
7. Greasers
8. Greasers
9. Blacksmiths
10. Coolies
11. Winders
12. Masons
13. Wircmen
14. Painters

Rs. $500-0$ to Rs. $650-0$ p.m.
Rs. 185- 0 to Rs. 350-0 do.
Rs. 185-0 to Rs. 350-0 do.
Rs. 65- 0 to Rs. 105-0 do.
Re. 1-4 to Rs. $2-8$ per day
Rs. $30-0$ to Rs. $50-0$ p.m.
Re. 1- 4 to Rs. 3-0 per day
Rs. 20- 0 to Rs. $30-0$ p.m.
Re. 0-14 to Re. 1-2 per day
Re. 1-4 to Rs. $2-8 \quad$ "
Re. 0-10 to Re. 1-2 "
Re. 1-4 to Rs. 2-8 ",
Re. 1- 4 to Rs. 2-8 "
Re. 1-4 to Rs. $2-8$;

| 16. Turners | Re. | 1-4 to Rs. | 2-8' pe | er day |
| :---: | :---: | :---: | :---: | :---: |
| 17. Pump-Drivers | Rs. | 30-0 to Rs. | 50.0 | p.m. |
| 18. Chowkidars | Rs. | 15-0 to Rs. | 20.0 | p.m. |
| 19. Jamadar | Rs. | 21- 0 to Rs. | 28-0 | p.m. |
| 20. Apprentices (Literate) | Rs. | 50- 0 to Rs. | 90-0 | p.m. |
| 21 \& | Rs. | 50- 0 to Rs. | 120-0 | p.m. |
| 21. Linemen <br> 22. Mistris | Re. | 1-4 to Rs. | 2-8 | p. |
| 23. Jamadar Coolies | Re. | 1. 4 to Rs. | 2-8 |  |
| 24. Switch Board Attendants | Re. | 1-4 to Rs. | 2-8 | " |
| Factory N. |  |  |  |  |
| 1. Mistri |  | Rs. | 30-0 | p.m. |
| 2. Coolies |  | Rs. | 0-6 p | per day |
| 3. Turners |  | Rs. | 40-0 | p.m. |
| 4. Factory-Manager |  | Rs. | 200-0 | p.m. |
| 5. Fitters, Carpenters \& ironsm | miths | Rs. | 30-0 | p.m. |
| Factory 0. |  |  |  |  |
| 1. Head Chowkidar | . | Rs. | 28-0 | p.m. |
| 2. Chowkidar |  | Rs. | 20-0 | p.m. |
| 3. Mason |  | Re. | 1-12 pe | per day |
| 4. Dyer |  | . Rs. 1 | 10. 0 | p.m. |
| 5. Another Dyer |  | Rs. | 52- 0 | p.m. |
| 6. Coolies | Re | 0. 8 to Re. | 0-14 | daily |
| 7. Firemen |  | Re. | 1-8.6 | daily |
| 8. Fitters |  | 1. 0 to Re. | 1-12 | daily |
| 9. Blacksmith |  | Re. | 1-8 p | er day |
| 10. Turner |  | Re. | 1-12 | " |
| 11. Carpenter |  | Re. | 1-12 | " |
| 12. Carding Jamadar. |  | Re . | 1-10 | " |
| 13. Carder | As. | 13-0 to Re. | 1. 0 | " |
| 14. Mochi |  | Re. | 1. 3 | " |
| 15. Spinning Jamadar |  | Re. | 1-8 | " |
| 16. Spinners | As. | 8-0 to Re. | $1-0$ | " |
| 17. Reelers | As | 60 to As. | 7 -0 | " |
| 18. Teasers | As. | 12-0 to As. | 15-0 | " |
| 19. Teasing Jamadars |  | Re. | 1-15 | " |
| 20. Mender |  | Re. | 1-4 | " |
| 21. Packer |  | Re. | 1-0. | " |
| 22. Winders |  | As. | 7-0 | " |
| - Factory P: |  |  |  |  |
|  |  |  | Rs. A. |  |
| 1. Engine-Driver |  | - | 400 | p.m. |
| 2. Ropeman |  | $\cdots$ | 330 | " |
| 3. Oilman |  |  | 210 | " |
| 4. Fireman |  | . | 300 | " |
| 5. Mechanics |  | . | 400 | " |
| 6. Blow-room |  | --. | 180 | " |
| 7. Carding Tenters and Lap | Carrie | rs | 180 | " |
| 8. Drawing Frame |  |  | 220 |  |
| 9. Slubbing Frame |  | - | 230 | " |


4. Children between 12 and 15
5. Head Dyer
6. Other Dyers
7. One Driver and Engineer
8. Fireman

Factory $\mathbf{S}$.

1. Engineer
2. Superintendent
3. Assistant Superintendent
4. Head Fitter
5. Drivers
6. Firemen
7. Boiler Cleaners
8. Oilmen
9. Coalmen
10. Engine-Cleaners
11. Sweeper
12. Gate-Keeper
13. Well Chowkidar
14. Sub-station Fitter
15. Coolie
16. Electrician
17. Electrician Coolie
18. Chowkidar

Factory T.

1. Foreman -
2. Chowkidar
3. Fitter
4. Fitter Tinsmith
5. Turner
6. Janior Tarner
7. Carpenter
8. Moulder
9. Coolies
10. One boy Coolie

Factory U.

1. Factory Superintendent
2. Transport Clerk
3. Factory Foreman
4. Storekeeper
5. Laboratory Assistant
6. Laboratory Attendants
7. Laboratory Cleaners
8. Resin Foreman
9. Turpentine Foreman
10. T'urpentine Coolie
11. Rosin Foreman
12. Rosin Assistant
13. Rosin Stocking Coolie
14. Head Distiller
15. Fitter
16. Fitter Coolie

About Rs. 12 p.m.
Rs. 83 p.m.
Rs. 20 to Rs. 25 p.m.
Rs. 60 p.m.
Rs. 35 "
Rs. 900 p.m.
Rs. 440 n
Rs- 125 "
Rs. 105
Overtime allowance Rs. 15 p -m.
Rs. 40 to Rs. 60 p.m.
Rs. 30 p.m.
Rs. 20 "
Rs. 17 "
Rs. 17 "
Rs. 18 ".
Rs. 12 "
Rs. 20 "
Rs. 20 "
Rs. 130 "
Rs 18 "
Rs. 70 "
Rs. 20 "
Rs. 19 "
Rs 110 p.m.
Rs. 20 "
Rs. 66 and 52 p.m.
Rs. 50 p.m.
Rs. 67 ,
Rs. 35 "
Rs. 60 "
Rs. 67 "
Rs. 20 n
Rs. 10 "
Rs. 168 p.m.
Rs. 80 "
Rs. 100 "
Rs. 60 ,
Rs. 42 "
Rs. 22 n
Rs. 20 "
Rs. 41 "
Rs. 30
Re. 0110 to Re. 0120 per day
Rs. 33 p.m.
Rs. 25 "
Re. 0120 per day
Rs. 99 p.m.
Rs. 45 ,

- Re. 014 ó per day

17. Maintenance Carpenter
18. do Blacksmith
19. Maintenance Coolie
20. Maintence Water-carrier

21 Sweeper
22. Boiler in charge
23. Boiler Fireman
24. Boiler Apprentice
25. Resin Collection Coolie
26. Vacuum Plant Cleaner
27. Firewood Coolie
28. Ash removal
29. Gas Eugine
30. Cinder Collection
31. Mason
32. Saw-Machine Mistri
33. Saw-Machine Coolie
34. Distillers
35. Assistant Distillers
36. Lagging
37. Rosin Shed Foreman

38 Dipping Coolies
39. Vacuum Plant
40. Chowkidar

Rs. 60 p.m.
Rs. 55 "
Re. 014 " 0 per day
Re. 0120 "
Re. $0 \quad 80$ "
Rs. 80 p.m.
Rs. 26 "
Re. 0140 per day
Re. 0120 ,
Re. 0120 "
Re. 0120 "
Re. 0120 "
Re. 0120 "
Re. 0120 "
Rs. 240 daily
Rs. 40 p.m.
Re. 0120 daily
Rs. 82, Rs. 45, Rs. 35 p.m.
Rs. 40, Rs. 35, Rs. 35 p.m. Rs. 33 p.m. Rs. 30 , As. 12 daily As. 12 " Rs. 18 p.m.

## Factory V.

1. Power Generating Department
2. Drivers
3. Assistant Firemen
4. Oiler, Power House
5. B. H. Aspitman
6. Coolies

II Slurry Production Department.

1. Fitters
2. Motor-Man
III. Clinker Production Department
IV. Cement Production Department.
3. Miller
4. Oiler
5. Cleaner
6. Mortor-Man
V. Cement Packing Department
7. Male Coolies
8. Coolies
VI. Laboratory Department
9. Calcimetres
10. Testers
VII. Raw Mill Department.
11. Cleaners
12. Khalasis
VIII. Stores.
13. Cobbler
14. Chowkidar
15. Fitters
Rs. 2-4 to Rs. 3-0
daily
16. Motor-Man As. $10-0$ to Rs. $2-8$ daily

Rs. $2-6$ to Rs. 3.0 per day
Re. 1-8 per day
Re. 1-2 "
Re. 1-0 "
As. 10-0 "
Rs. $2 \cdot 7$ per day
Between Re. 1-2 and Rs. 2-8 per day

Re. 1-10 daily
Re. 1-2 "
As. 8-0 "
Rs. 2-2 "
Re. 1-0 "
As. 10-0 "
Re. 1-0 "
As. 8-0 "
As. 10-0
Re. 1-8 "
Re. 1-2 "

IX W(rkshop

1. Fitters
2. Moulders
3. Torners
4. Blacksmith
5. Blacksmith Coolies
6. Carpenters
7. Coolies
X. Masons
XI. Khalasis

XII- Saperior Staff (Permanent)

1. Manager
2. Engineer
3. Works Foreman
4. Chemist
5. Accountant
6. Assistant Engineer
7. Asssitant Foreman
8. Laboratory Assistant
9. Chief Time-keeper
10. Assistant Time-keeper
11. Store Keeper

Re Rs. 24 per day
Re. 1-0 to Rs 3-0 ", Rs 2-8
"
As. 10-0 to Rs. 2-8 $\quad$,
As. 8.0 to As. 10-0 ",
Re. 1-8 to Re. 3-0 ",
As. 80 to As. $10-0 \quad "$
Re. 1-8 to Rs 2-8 ",
As. 12-0 to Re. 1-4 ",
Rs. 1,050 per month

Rs. 1,050 per month
Rs. 928
"
Rs. 700
"
Rs. 425 "
Rs. 400 "
Rs. 262 "
Rs. 125 ,
Rs. $40-0$ to Rs. 112 "
Rs. 92 "
Rs. $35-0$ to Rs $72 \quad$ "
Rs. 77 "

## APPENDIX B.

The following questionnaire was used by the Author for the collection of family budgets of factory-labourers in 1920 and 1921. The results obtained therefrom appear in Chapter III.
I. Family:-
(a) What religion!
(b) How many persons in Household?
(State sex, age and relationship with the labourer)
(c) How many children have died and from what cause?
(d) What is the state of health of each member?
(e) What other dependents (a) living with family, (b) living elsewhere !
(f) District of origin of the labourer.
II. Family Income:-(Average monthly income for the preceding year).
(a) What was labourer's monthly wages 9 How much commis$\operatorname{sion} 9$
(b) What other wage-earners were there in the household! What relations were they to the labourer 9 And what were their occupations?
(c) What was the average monthly wage of each wage-earner 9
(d) What additional monthly income (e.g. from property) was obtained and from what source?
(e) What were the receipts in kind during the preceding year and what was their approximate value?
(f) How many hours' work a day?
(g) Is work regular or intermittent
(h) State days of unemployment during the last year.
III. Housing.
(a) Is house separate or a tenement?
(b) Is it owned or rented 9
(c) What is the rent?
(d) Does the labourer pay for repairs 9 If so, how much does he pay?
(e) Is there any sub-tenant If so, how mach does he pay?
(f) How many rooms? And what are the dimensions of each.
(g) State use of each room.
(h) Is house made of brick or mud
(i) How are rooms (i) ventilated (ii) roofed and (iii) lighted 1
(j) Describe furniture of each room. Describe flooring.
(k) What bathing arrangements are there: Describe conditions of surroundings.
(1) What sanitary arrangements are there?
(m) Where is drinking water obtained from?
( $n$ ) Is there any accommodation for live-stock?
(o) What livestock is there?
(p) Is there any yard 9 If so, is it private or common to several houses?
IV. Food:-(Average monthly last year).
(a) State number of meals taken by family per day.
(b) State kind of food consumed (e.g., fish, meat, wheat, ghee, rice, sugar, vegetables, milk oil, etc., etc.).
(c) Stata quantities of each ordinarily consumed per month in the family.
(d) State expenditure on each article of food per month, including salt and spices.
(e) When are bills for varions articles of food paid?
(f) Mention whether bought cooked or not.
(g) At what intervals are various kinds of goods bought?
(h) State kind and monthly cost of fuel for cooking.
(i) What was the expenditure on cooking atensils or pottery last year?
(j) What arrangements are there for storing food (a) raw materials, (b) cooked food 9
(k) What arrangements are there for washing cooking utensils 9
V. Lighting arrangements.

What is the natore and cost of artificial lighting If lamps are used, state kind of oil used.

## VI. Services:-

(a) What is the monthly cost of barbering for the family?
(b) What is the monthly dhobi (laundry) bill

## VII Clothing:-

(a) Give details of clothing bought for family last year.
(b) Give defails of shoes bought last year.
(e) State cost of each article (if homemade, give cost of material and making np).
(d) Were any clothes handed down by dowry to the family?
(e) Were any gifts of clothing received during the yeart If so, from where?
(f) Give details of any expenditure on clothes-mending and shoe-repairs.
VIII. Edncation:-
(a) Has the labourer read any langaage If so, which 9
(b) Can he write any language?
(e) Can any of the family read or write?
(d) What is the expenditure on education of children? And where are they educated?

## JX. Medical Attendance:-

(a) Give cost of any medical attendance to the family doriog the last year (inclading medicine).
(b) Mention disease or ailment for which-medical attendance was obtained last jear.
(c) What were the qualifications of the physician?
(d) Is the civil dispensary made use of If not, why not 9
X. Ceremonies:-
(a) Give list of ceremonies in the family during the last four years.
(b) What was the cost on each occasion?
(c) Mention any ceremonies which were attended outside family eircle and any expenditure incorred thereon.
(d) Has any member of the family been to a place of pilg:-


## XI. Amusements:-

Give details of expenditure during last year on fairs, tobacco, drinks, betel-nat, etc., etc.
XII. Entertainment of Guests.

Give details and cost of entertaining guests or other hospitality (not alrcady incladed under other heads).
XIII. Charities or Presents:-

Mention expenses, if any.
XIV. Savings:-

What was the amount actually saved last year 9 How is it utilised?
XV. Mention any expenditure on sundries not included in above heads e.g. stationery, stamps; soap, etc.

## XVI. Indebtedness:

(a) Give total amount of any debts.
(b) How were they incarred 9
(c) What is the amount of debts repaid last year?
(d) What is the amount of monthly interest due?
(e) What is the amount of interest actually paid last year?
(f) What is the security offered to the bania by the labourer?

## APPENDIX C.

The following questionnaire was framed by the Author in April, 1927, and copies of it were circulated amongst the factory-owners in the Puajab. The scheme was later on dropped and the Author himself collected a mass of material in the light of this questionairre in his tour of the Punjab in 1927. The results of the enquiries thus made appear in the foregoing pages.

For Factory owners only.

1. Business:-
(a) State your business. When was it started 9
(b) Crive the total number of your employees classified as uuder:-

| (1) | Adults (male) |
| :--- | :--- |
| (11) | Adults (female) |
| (111) | Children (male) |
| (VV) | Children (female) |
| (V) | Total |

(c) Give the number of skilled as well as unskilled labourers under you.
(d) Have you got any apprentices 9 If so, state duration and the kind of training given.
II. Contract of work:-
(a) How are labourers employed 9 .Direct or through contractors?
(b) If through contractor, state the commission paid.
(c) Is contractor an independent man or in your employ?
(b) What is the length of notice for bringing the contract to an ena on both sides!
(e) State the average period of service of labourers under different categories.
III. Working Hours:-
(a) State the number of working hours in your firm per week and per day.
(b) Are the workers engaged overtime if so, how long and at what periods? How is overtime wage reckoned?
(c) Does any labourer work on Sundays or other holidays?
(d) State the number of holidays including the weekly day of rest which the workers receive every year.
IV. Wages:-
(a) How are they calculated By piece-work or day-work, or any other way.
(b) Are wages paid weekly, fortnightly or monthly?
(c) Are the employees paid any bonus in addition to wages? Are their wages cat down in any way?
(d) Are wages paid in money? State the amount and value of payment, made in kind. (e.g. house free of rent, free oil, fuel, ete).
(e) State your rules in regard to fines on workmen.
(f) If the worker leaves without notice, are his wages forfeited wholly or partially? If so, where do they gof State the uncuant oî unclaimed or forfeited wages during the last two years.
(g) Give the rates of wages in different categories in as much detail as possible.
F. Btrikes and Lock-outs:-
(a) State the number of strikes and lock-outs in your factory ever since its establishment.
(b) State causes of the same.
(c) Give dates of commencement and termination.
(d) State the number of employees directly engaged in the dispates as compared with the total number at the time in your factory.
(e) Describe the number of workers who were thrown out of employment but who were not directly engaged in the dispute.
(f) Give the amount of loss to the employers in each strike.
(g) Give the total amount of loss in wages which the-workers (strikers and non-strikers) suffered during the period of strike.
(h) What was the result of the strike?
(i) What was the attitude of other employers towards the dispute ${ }^{1}$

> (For Chambers of Industries only).
(j) Give the total amount of money spent by your Association on different strikes.
(k) How was it spenti With what end in view?
(l) State the number of establishments connected with your Association.
VI. Medical:-
(a) What arrangements exist in the factory as regards medical relief! Is there any physician attached to the factory? If so, state his qualifications, and the number of hours pat in by him for his patients.
(b) State the number of patients treated by him every day on. an average. What is the most prevalent disease or diseases? State causes, if possible.
(c) Is there any indoor ward for the patients If so, state the number of patients in it on an average every day.
(d) State the amount of money spent by the factory on medicines, on the doctor's salary and on compounder or dresser, if any.
VII. Water:-
(a) Is there any supply of cool water in the factory for the workmen?
(b) Where is the water obtained from? Is it filtered or not 9

VIII Edacation:-
(a) What is the total number of literate labourers? Describe under the following heads:-

> (i) Male
> (ii). Female.

Note:-The term literate refers to a person who can both read and write any language.
(b) Is any school maintained by the Factory 9 If so, state the total number of students. State as well the courses of instruction and the kind of training imparted to students.
(c) How many teachers are there in the School? What is the qualification of each?

## IX Housing:-

(a) Are quarters supplied to workmen?
(b) State total accommodation.
(c) Give dimensions of a typical room. Is it white-washed or not Is floor cemented or not 1 is it ventilated 9 If $s c_{\text {, }}$ how?
Give full details bearing on this question.
X.. Miscellaneous:-
(a) Is any cinema show maintained by the employers for their workmen?
(b) Where do the mill-hands stay during the mid-day interval 9 Is any park or shed provided for this purposeq When and where do the workers dine at the time of rest, i.e., mid-day interval 9
(c) Are First-Aid appliances maintained by the factory proprietor?
(d) Has the mill proprietor been ever punished (fined or warned) for a breach of law If so, state the exact fault.
Note:-The auswer should relate to the last five years, i.e., 1922-26.
(e) Are the workers given to loitering in the working hours of the mill If so, state the amount of time wasted in this way daily by each wage-earner.
(f) State the number of latrines in the premises of the factory. Also give the number of urinals.
(g) State the number of sweepers especially set apart for keeping the latrines and urinals clean. What are their working hours?
(h) Discuss the effect of factory conditions on the health and efficiency of workers.
(i) What is the general temperature of your mill during the working hours? Is it steam-heated during winter 9 Are there any cooling arrangements in the summer season ${ }^{-1}$ It so, describe their nature.
(j) Are you in favour of a working day of nine hours 9 Give reasons for your answer.
(k) Was the employer ever dragged into court by the worker If so, on what grounds, and with what results 9
(1) State your grievances, if any, against the workers.
(m) Give details, if any, of insurance of labour on your part against risks under the Workmen's Compensation Act.

## GENERAL INDEX

## A.

Accidents-
definition of, 158.
statistics of in Punjab, I49, 150.
causes of, $146,147,148,150,15 \mathrm{I}, 152$.
evils of, 146.
compensation for-Voluntary, 152, 153, legal. see workmen's Compensation Act.
Anderson, I4.
Andrews C. F., n. 40.
Appleton W. A., I71, 172.
Apprentices in factories, $188,189$.
Arbuthnot F. F., I6.

## B

Bahi, 65.
Bellhouse Gerard, 147.
Bengalee, Hon'ble Mr. Sorabjee; 19, 2 I.
Bhat K. S., 14,
Blaney Dr., 16, 17, 18, 19, 21.
Blum Solomon, n 51, n 52, n 118.
Board of Economic Enquiry, Punjab, 182, 183.
Broughton Miss, 115 n.
Budgets family, $44,45,49,62,63,64$. Bythel Hon'ble J. K., 16.

## 0

Calvert, I39, 144, 145.
Carpenter Miss, $14,16$.
Carpet factories-
bad condition of, 32.
case for inclusion in the Factories Act, 33.
Caste, 140, 141.
Cecil Lord Robert, n I89.
Chamanlal, 72, 73.
Chatterjee Sir A. C., 170.
Chelmsford Lord, 179.
Child marriage among factory workers, 37, 38, 39.
Children in factories-
age of employment of, $17,18,20,22$, 25, 30, 32, 90, 92.
certification Of, 25, 90, 91, 92.
double employment of, 31 .
education of, 18, 30 .
hours of work of, $20,22,25,27,29$ 30.

Clow A. G., n 155, n 158.

Compulsory Education Act, 1919, 185, 186.

Conciliation Boards, 183.
"Contracting in" in Indian trade unions, 17 I .
Co-operative stores, 176, 177, 178.
Cranbrook Viscount, 19.
Creches
Creches in factories, III.
Croft John, 19.
Cross Viscount, 23.

## D

Dais, 128
Dinshaw Manockjee Petit, 17.
Drinking water, supply of in factories, 82,83 .

## 

Enfield A. H., n. 177.

Factories-
definition of, 156. cloak-rooms in, 118. latrines in, see latrines.
lighting in, 87.
sanitation of, 17, 20, 81, 82, 83 .
statistics of in Punjab, 6, 7, 80 .
ventilation in, see ventilation.
Factory-doctors, necessity of, 59, 60, 61.

Factory inspection, 27, 28.
history of in Punjab, 93, 94. defects of, 94,95 .
Factory labourer-
complaints against, 96, 98.
conditions of employment of, 58,59.
cruel treatment of, 53.
economic condition of, 42-73, 175.
expenditure of, $62,63,64$.
health of, compared to prisoners, 102-108
housing of, see housing.
illiteracy of, 40-42, 184.
indebtedness of, $64,65,66$.
inefficiency of, $95,96,114$.
intemperance of, $67,68,69,70$.
migratory nature of, $99,100,101$.
recruitment of, 35, 39,
social and religious customs of, 36-40.

Factory labourer-(Continued)
social vices of, 70, 71 .
supply of and demand for, 134-145.
Factory labour commission-
(Bombay), 1875, 16, 17.
1884, 20, 21.
Indian, 1890, 21, 22, 153.
1907, 26, 27, 82,
84, 93, 95, 109, 114.
Factory legislation Indian-
genesis of, 9 ,
history of, 9-34.
nature of, II, 13, 19.
Factory Act of 1881, 20, 87.
Factory Act of 1891, 24, 25.
Factory Act of I9II, 28, 29.
Factory Act of 1922, 30, 154 .
Factory Act of 1926, 31.
Factory manager, qualifications of, 54, 55.
Fatigue, 97, 109.
Fines in Indian Factories-
arbitrary nature of, 56, 57.
necessity for regulation of, 57, 58.
Freer Smith Sir, 25.

## G

George Henry, 5.
Goldmark J, n 97, n 109.
H
Hakim, 6I,
Hamilten Lord George, 15
Helms, II.
Hobson, $\mathbf{n} 110$.
Holidays, 17, 18, 20, 21, 22, 23, 24, 25, 30, 31, 89, 90.
Holland Sir Thomas, 169, 170.
Hours of work in factories. 17, 18, 26, $27,28,29,30,87,83,89,108,109$, 110.

Housing, 119 - 133.
Hutchins Sir Philip, 23.

## I

Industrial revolution, effects of, 5 .
Industrial education, 188.
Infant mortality in Punjab, 126, 127, 128, 129.
Infant mortality in England, 130.
Innes Sir Charles, 30.

## J

Jones, 2 I.
Joshi N. M., III, 169, 170.

## K

Kelly E. T, n 75, n 78.

Kismet, 146.
Kitteridge G. A, 17.

## L

Labour adult, regulation of hours of $20,22,26,27,28,29$
Labour bureau, necessity of in Punjal 181, 182.
Labour conference, Geneva, I6I. Washirgton, 29, III, 190.
Latifi, 1140.
Latrines, in factories, 81, 82. in houses, $124,125$.
Lescohier, 178.
Lethbridge, A. S. 2I.

## M

 21.

Marshall Alfred, 73, 185.
Maternity benefits, bill for the intro duction of in India, III, 112, 113.
Maternity welfare, 130, 131.
Maxwell $H_{\text {, }} 16$.
Middleton, 14I.
Mitra Sir B. N. 73.
Mistri, 49, 50, 168.
Montagu E. S. Rt. Hon'ble, 14, 169.
Moore, major, 9 .
Morarjee Gokuldas, 17.
Morison, W. T., 26.
Muklawa, 38.
Mulock, 20.
Mungaldas Nathoobhoy Sir, 16.

## N

Nair, T.M., 12, 28.
Northbrook Lord, 12.

## $\mathbf{P}$

Pardah, 14
Proud E.D., n74.
Provident fund, the necessity of $i$. factories, 178.
Punjab-
climate of, 2.
physical features of, 1 .
population of, 3 .
railways in, 1, 2.
roads in, 2.

## R

Railway Union Lahore, 173, 174.
Read Margaret, n36, n94, nI 18.
Records-
the necessity of in factories, 114,17
models of, 115, 116, 117.
Redgrave Alexander, $10,15$.
Report of the Indian industrial commission, n96, n98, ni3t, ni33, nI85, ni87, ni88.
Rest interval in factories, $20,22,27$, 28, 3I, 88.

## S

'Safety first ' devicesnecessity of, 148. advantages of, 148 .
Saklatwala S., 14.
Salisbury Lord, 12, 15.
Shaftesbury, the earl of, 15,19.
Strikes in -
Punjab, 165, I66, I67, 168.
features of, $16 \%, 168$.

## T

Times, London, 10, II, 19.
Trade boards, desirability of in Punjab, 183, 184.
Trade unions-
definition of, 164.
necessity of, in India, 164.
objects of, 172.
Conditions for the success of, I64, 165.
audit of the funds of, 173 .
officers of, 173 .
political objects of, 171, 172173.
benefits of, $\mathbf{I} 68, \mathbf{I} 69$.
Trade Union Act-
Indian, 1926.
genesis of, 169, 170.
privileges conferred by, $\mathbf{1 7 0 , 1 7 1}$.

## $\nabla$

Ventilation-
in factories, 17, 18, 20, 21, 28, 83-87.
in houses, $119,120,121,124$.

## W

Wages-
definition of, 156.
payment of, $21,45,46,47$.
differences in, 50, 51, 52.
weekly payment of -
bill for, 72, 73.
case for, 71, 72, 73.
monthly payment of -
case for and against, 72, 73.
Wage census, need of, 50.
Wallace A. J., ni47.
Webb S., 164, nI8I.
Welfare work-
case for, 73, 74 .
lines of progress of, 76, 77, 78.
in Punjab, 75.
Welfare-worker-
duties of, 76, 77, 78.
Qualifications of, 79.
Women in factories-
and dangerous work, 28.
hours of work of, 21, 25, 28.
and night work, 25, 28.
Workmen's compensation Act, Indian-
genesis of, 153, 154.
scope of, I55, 156.
exceptions to, 155, 156, 158, 159.
conditions of compensation, 158.
scales of compensation, 159, 160.
procedure under, 160.
Workmen's Compensation Act, Indian-
commissioners under, 157, 159, 160 163.
advantages of, $\mathbf{1 6 r}$.
amendment of, 16 r .
defects of, 162, 163.
Worker's welfare league of India aims of, 189 , 190.
young person's class, creation of, 21, 27, 28.

## BY THE SAME AUTHOR

## Factory Labour in India

(Published by:the Annamalai University)

TWO OPINIONS:
Professor V. G. Kale, Poona: ." You have done your work very well indeed and the book will be a substantial contribution to our literature on the subject."

SIR RICHARD BURN, OXFORD: " You have the spirit of the investigator who is prepared to go to the original sources and not take things at second hand. Moreover, you have been able to exhibit the result of your enquiries in an interesting manner."


[^0]:    188, West Hill; London: March, 1928. $\}$

