

Carnegie Endowment for International Peace

DIVISION OF ECONOMICS AND HISTORY

PRELIMINARY ECONOMIC STUDIES
OF THE WAR

ECONOMIC EFFECTS OF THE WORLD WAR
UPON WOMEN AND CHILDREN
IN GREAT BRITAIN

SECOND (REVISED) EDITION

BY
IRENE OSGOOD ANDREWS
Assistant Secretary of the American Association
for Labor Legislation

AND
MARGARETT A. HOBBS

SECOND (REVISED) EDITION

NEW YORK
OXFORD UNIVERSITY PRESS
AMERICAN BRANCH: 35 WEST 32ND STREET
London, Toronto, Melbourne and Bombay
1921

Carnegie Endowment for International Peace

DIVISION OF ECONOMICS AND HISTORY

JOHN BATES CLARK, DIRECTOR

PRELIMINARY ECONOMIC STUDIES OF THE WAR

EDITED BY

DAVID KINLEY

President of the University of Illinois
Member of Committee of Research of the Endowment

No. 4

ECONOMIC EFFECTS OF THE WAR UPON WOMEN AND CHILDREN IN GREAT BRITAIN

BY

IRENE OSGOOD ANDREWS

Assistant Secretary of the American Association
for Labor Legislation

AND

MARGARETT A. HOBBS

SECOND (REVISED) EDITION

NEW YORK

OXFORD UNIVERSITY PRESS

AMERICAN BRANCH: 35 WEST 32ND STREET

London, Toronto, Melbourne and Bombay

1921

FIRST EDITION
FEBRUARY, 1918

SECOND (REVISED) EDITION
MAY, 1921

COPYRIGHT 1921
BY THE
ARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE
2 JACKSON PLACE
WASHINGTON, D. C.

PRESS OF BYRON S. ADAMS
WASHINGTON, D. C.

ECONOMIC EFFECTS OF THE WORLD WAR
UPON WOMEN AND CHILDREN
IN GREAT BRITAIN

Preliminary Economic Studies of the War

EDITED BY DAVID KINLEY

*President of the University of Illinois
Member of Committee of Research of the Endowment*

1. EARLY ECONOMIC EFFECTS OF THE WAR UPON CANADA. By Adam Shortt, formerly Commissioner of the Canadian Civil Service, now Chairman, Board of Historical Publications, Canada.
2. EARLY EFFECTS OF THE EUROPEAN WAR UPON THE FINANCE, COMMERCE AND INDUSTRY OF CHILE. By L. S. Rowe, Professor of Political Science, University of Pennsylvania.
3. WAR ADMINISTRATION OF THE RAILWAYS IN THE UNITED STATES AND GREAT BRITAIN. By Frank H. Dixon, Professor of Economics, Dartmouth College, and Julius H. Parmelee, Statistician, Bureau of Railway Economics.
4. ECONOMIC EFFECTS OF THE WORLD WAR UPON WOMEN AND CHILDREN IN GREAT BRITAIN. By Irene Osgood Andrews, Assistant Secretary of the American Association for Labor Legislation.
5. DIRECT COSTS OF THE PRESENT WAR. By Ernest L. Bogart, Professor of Economics, University of Illinois.
6. EFFECTS OF THE WAR UPON INSURANCE WITH SPECIAL REFERENCE TO THE SUBSTITUTION OF INSURANCE FOR PENSIONS. By William F. Gephart, Professor of Economics, Washington University, St. Louis.
7. THE FINANCIAL HISTORY OF GREAT BRITAIN, 1914-1918. By Frank L. McVey, President, University of Kentucky.
8. BRITISH WAR ADMINISTRATION. By John A. Fairlie, Professor of Political Science, University of Illinois.
9. INFLUENCE OF THE GREAT WAR UPON SHIPPING. By J. Russell Smith, Professor of Industry, University of Pennsylvania.
10. WAR THRIFT. By Thomas Nixon Carver, Professor of Political Economy, Harvard University.
11. EFFECTS OF THE GREAT WAR UPON AGRICULTURE IN THE UNITED STATES AND GREAT BRITAIN. By Benjamin H. Hibbard, Professor of Agricultural Economics, University of Wisconsin.
12. DISABLED SOLDIERS AND SAILORS—PENSIONS AND TRAINING. By Edward T. Devine, Professor of Social Economy, Columbia University.
13. GOVERNMENT CONTROL OF THE LIQUOR BUSINESS IN GREAT BRITAIN AND THE UNITED STATES. By Thomas Nixon Carver, Professor of Political Economy, Harvard University.
14. BRITISH LABOR CONDITIONS AND LEGISLATION DURING THE WAR. By Matthew B. Hammond, Professor of Economics, Ohio State University.
15. EFFECTS OF THE WAR UPON MONEY, CREDIT AND BANKING IN FRANCE AND THE UNITED STATES. By B. M. Anderson, Jr., Ph.D.
16. NEGRO MIGRATION DURING THE WAR. By Emmett J. Scott, Secretary-Treasurer, Howard University, Washington, D. C.
17. EARLY EFFECTS OF THE WAR UPON THE FINANCE, COMMERCE AND INDUSTRY OF PERU. By L. S. Rowe, Professor of Political Science, University of Pennsylvania.
18. GOVERNMENT CONTROL AND OPERATION OF INDUSTRY IN GREAT BRITAIN AND THE UNITED STATES DURING THE WORLD WAR. By Charles Whiting Baker, C. E., Consulting Engineer.
19. PRICES AND PRICE CONTROL IN GREAT BRITAIN AND THE UNITED STATES DURING THE WORLD WAR. By Simon Litman, Professor of Economics, University of Illinois.
20. COOPERATIVE MOVEMENT IN RUSSIA. By E. M. Kayden.
21. THE GERMANS IN SOUTH AMERICA: A CONTRIBUTION TO THE ECONOMIC HISTORY OF THE WORLD WAR. By C. H. Haring, Associate Professor of History, Yale University.
22. EFFECTS OF THE WAR ON PAUPERISM, CRIME AND PROGRAMS OF SOCIAL WELFARE. By Edith Abbott, Lecturer in Sociology, University of Chicago.
23. (Abandoned.)
24. DIRECT AND INDIRECT COSTS OF THE GREAT WORLD WAR. By Ernest L. Bogart, Professor of Economics, University of Illinois. (Revised edition of Study No. 5.)
25. GOVERNMENT WAR CONTRACTS. By John F. Crowell, Ph.D., LL.D.

THE CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE
2 JACKSON PLACE, WASHINGTON, D. C.

*These numbers have not yet been published.

EDITOR'S PREFACE

The following work on the "Economic Effects of the War upon Women and Children in Great Britain," by Mrs. Irene Osgood Andrews, Assistant Secretary of the American Association for Labor Legislation, is the fourth in the series of preliminary war studies undertaken by the Endowment. Mrs. Andrews' monograph is a ^{comparative} study of the situation by one who has long ^{been} ⁱⁿ contact with working conditions of women and children in this country and abroad and the methods undertaken for their improvement. The author points out the difficulties and evil results of the hasty influx of women and children into industrial fields vacated by men who had gone into the army, but reaches the conclusion that on the whole the permanent effects are likely to be good. Such a conclusion by an author whose sympathies with laboring women and children are deep and whose outlook is broad is hopeful and cheering.

In the opinion of the editor, Mrs. Andrews has done her country a service in preparing this monograph, for her recital of the difficulties and evils of the British readjustment will enable our people to meet the same crisis when it comes upon us, as it surely will if the war continues, in the light of the experience of our Allies. If we go about the matter intelligently in the light of this study, we should be able to avoid some of the difficulties and evils of British experiences in this matter and open the way for a larger industrial life to women, while maintaining and indeed even improving, as we should, the conditions under which they are called upon to work and live.

DAVID KINLEY,
Editor.

AUTHOR'S PREFACE TO REVISED EDITION

Following the publication of the first edition, opportunity came in 1919 to visit again both England and France and to secure first hand information concerning the lives of and to secure first hand information concerning the lives of and to secure first hand information concerning the lives of of the war upon the economic position of women. As a member of the commission sent by the Young Women's Christian Association to study the industrial outlook for women and children, there was occasion to interview many representative people in this field and to collect a large amount of recently published material bearing upon the subject.

The world conflict brought to women, in those countries where the industrial system was kept intact, an extraordinary invitation to active employment outside the home and in new occupations. In England and France millions of women were dislodged from their accustomed tasks and thrown into novel positions in industry, in trade and commerce and even in the professions. Many thousands have remained in the new occupations, and the vast majority will never be content to go back to their former places on the old terms.

The remarkable physical endurance of the women doing war work has been very generally recognized. This endurance has been attributed partly to the zeal of the women, but more particularly to higher wages, which enabled them to secure better food, clothing and lodging. Comfort from increased income was supplemented by canteens, welfare work and greater consideration in general for the health of wage earners.

Will woman's improved income level be permanent? Careful analysis shows that during the war, despite government pledges, women did not receive equal treatment with men in respect to wages. Moreover, while money wages in many cases were greatly increased, seldom did they keep pace with the advancing cost of living. Furthermore, it

became doubtful whether women were to be allowed to retain the more attractive positions if these were desired by men.

No one, since the war experience, doubts the skill and adaptability of women in performing a great number of tasks formerly considered "men's work." With the extension and standardization which British industry has adopted more places can be successfully filled by women. Equal opportunity to secure positions, as well as equality of payment, appeals therefore to many thousands of women as merely a matter of justice. But such a new status for women, it is recognized, calls for more scientific methods in fixing wages. The old basis of sex, family obligation, tradition as to "men's work" and "women's work," must be abandoned. Instead, some definite rate for a specified occupation, and where possible specified qualifications as to ability for such work, must be adopted. Moreover, it is increasingly recognized that the national welfare demands that money wages must be at least equal to the cost of living.

Such a program would place men and women more nearly on a strictly competitive basis, with the awards given to the most efficient. It would practically eliminate the constant "undercutting" now taking place and would introduce a more scientific element into the present chaotic wage market.

The insistent need for a thoroughgoing revision as to methods of determining wage rates is recognized by Mrs. Sidney Webb in her minority statement in the *Report of the War Cabinet Committee on Women in Industry*, 1919. Mrs. Webb recommends for immediate adoption four main principles. (1) The establishment of a national minimum rate of wage; (2) the determination of a standard or occupational rate above the national minimum; (3) the adjustment of money wages to the cost of living; and (4) wherever possible the requirement of efficiency qualifications. As to children and "young persons" in Great Britain the Fisher Education Act already has indicated a greater emphasis on training and there is hope that their employment

will eventually become either subordinate to or, better still, a part of education.

The scarcity of labor now presents an appalling problem in several countries and one of the outstanding effects of the loss of human life in all war stricken nations is renewed interest in the protection of motherhood. In these countries measures are being adopted to conserve the lives of mothers and babies. Better medical and nursing care are recognized as essential, cash maternity benefits are increasing, maternity centers are being greatly extended and in England the endowment of motherhood is proposed.

This revised monograph, while attempting to present a fairly complete history of the industrial experience of women and children during and immediately following the war, is still necessarily tentative. Some years must elapse before it will be possible to measure the full effects of the world war upon the economic condition of women and children. This revision is brought out, however, at this time to supply a demand which quickly exhausted the first edition, and in the hope that it will be of service to those interested in the progress of women industrial workers.

IRENE OSGOOD ANDREWS.

New York City,
April, 1920.

CONTENTS

| Chapter | Page |
|--|------|
| I Introductory Summary | 1 |
| II Work of Women and Children before the World War | 14 |
| III First Months of the World War—Labor's At- titude toward the War—Unemployment among Women Workers | 20 |
| IV Extension of Employment of Women..... | 28 |
| V Organized Efforts to Recruit Women's Labor. | 50 |
| VI Sources of Additional Women Workers..... | 75 |
| VII Training for War Work..... | 84 |
| VIII Women and the Trade Unions..... | 87 |
| IX Control of Women Workers under the Muni- cations Act | 92 |
| X Wages | 99 |
| XI Hours of Work | 126 |
| XII Safety, Health and Comfort..... | 146 |
| XIII Effects of the War on the Employment of Chil- dren | 167 |
| XIV Effects of War Work on Women..... | 191 |
| XV Peace and Reconstruction | 204 |
| Appendices | 229 |
| Index | 251 |

APPENDICES

Appendix A

The following table, from a "Report to the Board of Trade on the State of Employment in the United Kingdom," of February, 1915, compares the number of males and females on full time, on overtime, on short time, and unemployed, between September, 1914, and February, 1915.

STATE OF EMPLOYMENT IN SEPTEMBER, OCTOBER AND DECEMBER, 1914, AND FEBRUARY, 1915

(Numbers Employed in July = 100 per cent.)

| | September, 1914 | | October, 1914 | | December, 1914 | | February, 1915 | |
|---|-----------------|-----------|---------------|-----------|----------------|-----------|----------------|-----------|
| | M | F | M | F | M | F | M | F |
| Full time | 50.2 | 53.5 | 66.8 | 61.9 | 65.8 | 66.6 | 68.4 | 75.0 |
| | 3,913,000 | 1,337,500 | 4,342,000 | 1,547,500 | 4,277,000 | 1,665,000 | 4,446,000 | 1,875,000 |
| Overtime | 3.6 | 2.1 | 5.2 | 5.9 | 12.8 | 10.8 | 13.8 | 10.9 |
| | 234,000 | 52,500 | 338,000 | 147,500 | 832,000 | 270,000 | 897,000 | 272,500 |
| Short time | 26.0 | 36.0 | 17.3 | 26.0 | 10.5 | 19.4 | 6.0 | 12.6 |
| | 1,690,000 | 900,000 | 1,124,500 | 650,000 | 682,500 | 485,000 | 390,000 | 315,000 |
| Contraction in Nos. employed | 10.2 | 8.4 | 10.7 | 6.2 | 10.9 | 3.2 | 11.8 | 1.5 |
| | 663,000 | 210,000 | 695,000 | 155,000 | 708,500 | 80,000 | 767,000 | 37,500 |
| Enlisted | 8.8 | ..... | 10.6 | ..... | 13.3 | ..... | 15.4 | ..... |
| | 572,000 | ..... | 689,000 | ..... | 864,500 | ..... | 1,010,000 | ..... |
| Net displacement (-) or replace- ment (+) | -1.4 | -8.4 | -0.1 | -6.2 | +2.4 | -3.2 | +3.6 | -1.5 |
| | -91,000 | -210,000 | -6,500 | -155,000 | +156,000 | -80,000 | +243,000 | -37,500 |

Appendix B

The following table indicates some of the processes formerly reserved for men on which the factory inspectors found women employed by the end of 1915:

| INDUSTRY | PROCESSES |
|---------------------------|--|
| Linoleum..... | Attending cork grinding and embossing machines, machine printing, attending stove, trimming and packing. |
| Woodworking— | |
| Brush making..... | Fibre dressers, brush makers and on boring machinery. |
| Furniture..... | Light upholstery, cramping, dowelling, glueing, fret-work, carving by hand or machine, staining and polishing. |
| Saw mills..... | On planing, moulding, sand-papering, boring, mortising, dovetailing, tenoning, turning and nailing machines. Taking off from circular saws; box making, printing and painting. |
| Cooperage..... | Barrel making machines. |
| Paper mills..... | In rag grinding and attending to beating and breaking machines, and to coating machines, calenders and in certain preparations and finishing and warehouse processes. |
| Printing..... | Machine feeding (on platen machines and on guillotines) and as linotype operators. |
| Wire rope..... | On stranding and spinning machines. |
| Chemical works..... | Attending at crystallising tanks and for yard work. |
| Soap..... | As soap millers and in general work. |
| Paint..... | At roller mills, filling tins and kegs, labeling and packing. |
| Oil and cake mills..... | Trucking, feeding and drawing off from chutes, attending to presses. |
| Flour mills..... | Trucking. |
| Bread and biscuits..... | Attending to dough-breaks, biscuit machines, and at the ovens assisting bakers. |
| Tobacco..... | Leaf cutting, cigarette making, soldering, trucking and warehouse work. |
| Rubber..... | At washing machines, grinding mills, dough rolls, solutioning, motor tube making. |
| Malting..... | Spreading and general work. |
| Breweries..... | Cask washing, tun-room work, beer bottling and bottle washing. |
| Distilleries..... | In the mill and yeast houses. |
| Cement..... | Attending weighing machines, trucking. |
| Foundries..... | Core making, moulding. |
| Tanning and currying..... | At the pits, in finishing and drying, and in oiling, setting up, buffing and staining. |
| Woolen mills..... | Beaming and overlooking, attending drying machines, carding, pattern weaving. |

| INDUSTRY | PROCESSES |
|---------------------------------|---|
| Jute mills..... | On softening machines, dressing yarn, calendaring. |
| Cotton mills..... | In blowing room on spinning mules, beaming, twisting and drawing, and in warehouse. |
| Hosiery..... | Folding and warehouse work. |
| Lace..... | Threading. |
| Print, bleach and dye works.... | Beetling, assisting printers at machines, warehouse processes. |

Appendix C

The following tables from the second report of the British Association for the Advancement of Science bring out in detail, first, the gradual disappearance of unemployment and short time and the increase of women's numbers in industry from September, 1914, to April, 1916; second, the changes in numbers of women in the various occupations, both industrial and non-industrial in December, 1915, and April, 1916, compared with July, 1914, and, third, similar details as to the number of women who were undertaking "men's work."

STATE OF EMPLOYMENT OF WOMEN AT VARIOUS DATES SINCE THE OUT-BREAK OF WAR, COMPARED WITH STATE OF EMPLOYMENT IN JULY, 1914

("Industrial" employment only. Numbers employed July, 1914 = 100 per cent.)

| | Sept., 1914 | Oct., 1914 | Dec., 1914 | Feb., 1915 | Oct., 1915 | Dec., 1915 | Feb., 1916 | April, 1916 |
|--|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Contraction (—) or expansion (+) in numbers employed | -8.4 | -6.2 | -3.2 | -1.5 | +7.4 | +9.2 | +10.9 | +13.2 |
| Employed on overtime..... | 2.1 | 5.9 | 10.8 | 10.9 | 13.9 | 14.5 | 12.8 | ..... |
| Employed on short time.... | 36.0 | 26.0 | 19.4 | 12.6 | 5.6 | 6.1 | 4.6 | ..... |

EXTENSION OF THE EMPLOYMENT OF WOMEN IN DECEMBER, 1915, AND APRIL, 1916

| Occupations Group | Estimated Industrial Population. July, 1914, Females | Increase (+) or Decrease (—) of Females in | |
|--|---|--|-----------------|
| | | Dec., 1915 | April, 1916 |
| Building | 7,000 | + 3,600 | + 6,400 |
| Mines and Quarries..... | 9,000 | + 800 | + 2,300 |
| Metal Trades | 144,000 | + 71,700 | +126,900 |
| Chemical Trades | 40,000 | + 19,400 | + 33,600 |
| Textile Trades | 851,000 | + 29,700 | + 27,800 |
| Clothing Trades | 654,000 | + 6,700 | + 11,700 |
| Food Trades | 170,000 | + 31,700 | + 30,900 |
| Paper and Printing Trades..... | 169,000 | ..... | — 900 |
| Wood Trades | 39,000 | + 7,400 | + 13,200 |
| Other Trades | 96,000 | + 25,400 | + 35,700 |
| All "Industrial" Occupations..... | 2,180,000 | +196,500 | +287,500 |
| Commercial | 474,500 | ..... | +181,000 |
| Professional | 68,500 | ..... | + 13,000 |
| Banking and Finance..... | 9,500 | ..... | + 23,000 |
| Public Entertainment | 172,000 | ..... | + 14,000 |
| Agriculture ..... | ..... | ..... | ..... |
| Transport | 9,500 | ..... | + 16,000 |
| Civil Service | 63,000 | ..... | + 29,000 |
| Arsenals, Dockyards, etc. | 2,000 | ..... | + 13,000 |
| Local Government (incl. Teachers)... | 184,000 | ..... | + 21,000 |
| Domestic Service ..... | ..... | ..... | ..... |
| Total for "Non-industrial" Occupations. | 983,000 | ..... | +310,000 |
| Total for all Occupations..... | 3,163,000 | ..... | +597,500 |

EXTENT OF SUBSTITUTION OF FEMALE FOR MALE WORKERS IN DECEMBER, 1915, AND APRIL, 1916.

| Occupations Group | Estimated number of Females on work in substitution of Males' work | |
|--|--|----------------|
| | December, 1915 | April, 1916 |
| Building | 6,100 | 8,800 |
| Mines and Quarries | 2,700 | 4,400 |
| Metal Trades | 70,300 | 117,400 |
| Chemical Trades | 9,600 | 16,200 |
| Textile Trades | 57,600 | 73,400 |
| Clothing Trades | 30,400 | 42,300 |
| Food Trades | 29,500 | 35,000 |
| Paper and Printing Trades | 22,500 | 23,600 |
| Wood Trades | 11,400 | 17,400 |
| Other Trades | 27,000 | 37,400 |
| All "Industrial" Occupations..... | 267,100 | 375,900 |
| Commercial ..... | ..... | 189,000 |
| Professional ..... | ..... | 16,000 |
| Banking and Finance ..... | ..... | 25,000 |
| Public Entertainment ..... | ..... | 32,000 |
| Agriculture ..... | ..... | ..... |
| Transport ..... | ..... | 18,000 |
| Civil Service ..... | ..... | 31,000 |
| Arsenals, Dockyards, etc. .... | ..... | 13,000 |
| Local Government (incl. Teachers) ..... | ..... | 37,000 |
| Domestic Service ..... | ..... | ..... |
| Total for "Non-industrial" Occupations..... | ..... | 361,000 |
| Total for all Occupations..... | ..... | 736,900 |

Appendix D

The following table, compiled from the quarterly reports in the *Labour Gazette* and a special report of the Board of Trade, gives the increase in the employment of women between April, 1916, and July, 1918, for the most of the important occupational groups. It can not be compared directly with the similar tables, previously given, prepared by the British Association for the Advancement of Science, because of slight differences in the estimates of the numbers employed in July, 1914.

EXTENSION OF THE EMPLOYMENT OF WOMEN IN THE UNITED KINGDOM, APRIL, 1916-JULY, 1918 (Classified by employers' position, not by nature of work.)

| | Estimated No. Empl. July, 1914 | Estimated increase since July, 1914 | | | | | | | | | | Per cent of increase July, 1914- July, 1918 |
|--|--------------------------------------|-------------------------------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| | | April, 1916 | July, 1916 | Oct., 1916 | Jan., 1917 | April, 1917 | July, 1917 | Oct., 1917 | Jan., 1918 | April, 1918 | July, 1918 | |
| Industrial Occupations ¹ | 2,176,000 | 275,000 | 361,000 | 393,000 | 423,000 | 453,000 | 518,000 | 529,000 | 533,000 | 537,000 | 565,000 | 26.0 |
| Government Establishments ² | 2,000 | 25,000 | 79,000 | 117,000 | 147,000 | 198,000 | 202,000 | 211,000 | 207,500 | 197,000 | 223,000 | 11,200.0 |
| Commercial | 496,000 | 166,000 | 240,000 | 268,000 | 274,000 | 307,000 | 324,000 | 333,000 | 343,000 | 354,000 | 364,000 | 73.4 |
| Professional (mainly clerks) | 50,500 | 13,000 | 14,000 | 15,000 | 18,000 | 21,000 | 20,000 | 50,000 | 50,000 | 57,000 | ..... | 4.0 |
| Banking, Finance (mainly clerks) | 9,500 | 23,000 | 32,000 | 37,000 | 43,000 | 50,000 | 54,000 | 59,000 | 61,000 | 63,000 | 65,000 | 687.0 |
| Hotels, Theaters, etc. | 181,000 | 12,000 | 20,000 | 16,000 | 10,000 | 13,000 | 22,000 | 28,000 | 26,000 | 25,000 | 39,000 | 21.5 |
| Agriculture (perm. labor Gt. Britain) .. | 80,000 | 14,000 | 20,000 | 500 | 14,000 | ..... | 23,000 | 7,000 | 6,000 | 9,000 | 33,000 | 41.3 |
| Transport (not municipal) | 17,000 | 23,000 | 35,000 | 41,000 | 51,000 | 62,000 | 72,000 | 77,000 | 76,000 | 78,000 | ..... | ..... |
| Civil Service | 66,000 | 39,000 | 58,000 | 67,000 | 76,000 | 89,000 | 98,000 | 116,500 | 124,000 | 159,000 | 168,000 | 255.0 |
| Local Government ³ | 198,000 | 21,000 | 30,000 | 34,000 | 44,000 | 47,000 | 49,000 | 51,500 | 51,500 | 53,000 | 52,000 | 26.5 |
| Other ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 150,000 | ..... |
| Total | 3,276,000 | 583,000 | 889,000 | 988,500 | 1,072,000 | 1,240,000 | 1,382,000 | 1,462,000 | 1,466,000 | 1,532,000 | 1,659,000 | 50.6 |

¹ Not owned by government.

² Includes arsenals, docks, government shell filling factories, etc.

³ Includes teachers and transportation workers for municipalities.

Appendix E

The following table, compiled from the *Labour Gazette*, and a special report of the Board of Trade, gives a quarterly estimate of the number of women replacing men for the period between April, 1916, and April, 1918.

NUMBER OF FEMALES SUBSTITUTED FOR MALE WORKERS IN THE UNITED KINGDOM IN CERTAIN OCCUPATIONS, BY QUARTERS, APRIL, 1916-APRIL, 1918

| | April, 1916 | July, 1916 | Oct., 1916 | Jan., 1917 | April, 1917 | July, 1917 | Oct., 1917 | Jan., 1918 | April, 1918 | Per cent No. of substitutes in April, 1918, is of total No. employed in July, 1914 |
|--|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|--|
| Industrial Occupations ¹ | 213,000 | 264,000 | 314,000 | 376,000 | 438,000 | 464,000 | 490,000 | 503,000 | 531,000 | 24.4 |
| Government Establishments ² | 13,000 | 79,000 | 117,000 | 139,000 | 187,000 | 191,000 | 202,000 | 197,000 | 187,000 | 9,350.0 |
| Commercial | 152,000 | 226,000 | 264,000 | 278,000 | 308,000 | 328,000 | 337,000 | 342,000 | 352,000 | 70.9 |
| Professional (mainly clerks) | 12,000 | 15,000 | 15,000 | 17,000 | 20,000 | 21,000 | 22,000 | 22,000 | 22,500 | 44.5 |
| Banking, Finance (mainly clerks) | 21,000 | 31,000 | 37,000 | 42,000 | 48,000 | 53,000 | 55,000 | 57,000 | 59,500 | 626.3 |
| Hotels, Theaters, etc. | 27,000 | 31,000 | 30,000 | 31,000 | 35,000 | 38,000 | 44,500 | 45,000 | 44,500 | 24.5 |
| Agriculture (perm. labor, Gt. Britain) .. | 37,000 | 35,000 | 20,000 | 23,000 | 32,000 | 43,000 | 33,000 | 31,000 | 40,000 | 50.0 |
| Transport (not municipal) | 24,000 | 35,000 | 41,000 | 52,000 | 64,000 | 74,000 | 78,500 | 78,000 | 79,500 | 21.3 |
| Civil Service | 30,000 | 41,000 | 64,000 | 73,000 | 88,000 | 99,000 | 107,000 | 123,000 | 153,000 | 231.8 |
| Local Government ³ | 18,000 | 26,000 | 31,000 | 40,000 | 41,000 | 43,000 | 44,000 | 44,000 | 47,000 | 23.7 |
| Total | 547,000 | 783,000 | 933,000 | 1,071,000 | 1,256,000 | 1,354,000 | 1,413,000 | 1,442,000 | 1,516,000 | 46.2 |

¹ Not owned by government.

² Includes arsenals, docks, government shell filling factories, etc.

³ Includes teachers and transportation workers for municipalities.

Appendix F

ESTIMATED NUMBER OF FEMALES DIRECTLY REPLACING MALES IN VARIOUS BRANCHES OF INDUSTRY IN JANU- ARY, 1918.

(Compiled from the Report of the War Cabinet Committee on Women in
Industry.)

| | |
|---|---------|
| <i>Trade</i> | |
| Metal | 195,000 |
| Chemical | 35,000 |
| Textile | 64,000 |
| Clothing | 43,000 |
| Food, Drink and Tobacco..... | 60,000 |
| Paper and Printing | 21,000 |
| Wood, China and Earthenware, Leather..... | 23,000 |
| Other | 62,000 |
| Government Establishments | 197,000 |
| Total..... | 700,000 |

ESTIMATED NUMBER OF FEMALES DIRECTLY REPLACING MALES IN VARIOUS BRANCHES OF COMMERCE IN APRIL, 1918.

(Compiled from the Report of the Board of Trade on the Employment of
Women in April, 1918.)

| | |
|--|---------|
| Wholesale and Retail Drapers, Haberdashers, Clothiers, etc. | 41,000 |
| Wholesale and Retail Grocers, Bakers, Confectioners..... | 92,000 |
| Wholesale and Retail Stationers and Booksellers..... | 16,000 |
| Wholesale and Retail Butchers, Fishmongers, Dairymen..... | 30,000 |
| Retail Chemists | 12,000 |
| Retail Boot and Shoe Dealers | 8,000 |
| Total (including some not specified above)..... | 352,000 |

Appendix G

ESTIMATE BY THE BRITISH WAR CABINET COMMITTEE ON WOMEN IN INDUSTRY ON AVERAGE WEEKLY EARNINGS OF WOMEN IN VARIOUS OCCUPATIONS AT THE END OF THE WAR.

Earnings under 25s. weekly:

Dressmakers, milliners (first five years), laundry workers, pottery workers (most grades), knife girls and kitchen hands in refreshment houses.

Earning between 25s. and 30s. weekly:

Cutlery workers, soap and candle makers (unskilled), corner tenters (cotton), woolen and worsted weavers, backwashers (Scotch Tweed), dyers and cleaners, biscuit makers, cigarette makers, pottery workers (certain grades), waitresses in refreshment depots.

Earning between 30s. and 35s. weekly:

Ammunition makers (women's work), chainmakers, salt packers, fine chemical workers, soap makers (most operations), card-room operatives (cotton), clothing machinists, workers in grain-milling and brewing, cigar makers, shop assistants (co-operative).

Earning between 35s. and 40s. weekly:

Workers in the light casting trade, chemical laborers, big tenters and ring-spinners (cotton), wool combers, tailoring fitters and cutters, boot operatives, bakery workers, jigger women in potteries, tanners, shop assistants (large stores).

Earning between 40s. and 45s. weekly:

Workers in engineering, chemicals (shift work) and explosives; textile dyers, tobacco machinists, motor drivers (for shop), railway carriage cleaners, telephonists, railway clerks.

Earning between 45s. and 50s. weekly:

Cloth lookers (cotton), hosiery machinists, web dyers, gas index readers and lamp-lighters, railway porters, ticket collectors, telegraphists.

Earning between 50s. and 60s. weekly:

Ledger clerks, Civil Service clerks (Class I).

Earning over 60s.:

Women on skilled men's work in engineering omnibus conductors (London), gas workers (heavy work for South Metropolitan Gas Co.).

Appendix H

NUMBER OF ORDERS MODIFYING THE LABOR LAWS, ISSUED FROM AUGUST 4, 1914, TO FEBRUARY 19, 1915

(*Report of the Chief Inspector of Factories and Workshops for 1914, p. 56.*)

| | |
|---|---|
| Textile: Wool 748 Hosiery 231 Cotton 159 Flax 28 Hemp and jute..... 29 Silk 8 Dyeing and finishing..... 37 Leather and leather equipment.. 105 Canvas equipment 137 Munitions 151 Shipbuilding 15 Electrical supply 35 Metal accessories 141 Machinery 57 Wood 44 | Clothing: Uniforms 514 Fur coats 9 Boots 245 Caps 28 Shirts 73 Bedding 33 Surgical dressings 21 Tobacco 10 Food 37 Tin boxes 37 Camp equipment..... 52 Wire and wire netting..... 34 Wagons, etc. 34 Rubber 16 Miscellaneous 73 <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> Total.....3,141 |
|---|---|

Appendix I

The following list of modifications of the hour laws in 1915 was compiled from the *Report of the Chief Inspector of Factories and Workshops for 1915.*

| <i>Industry</i> | <i>Persons Affected</i> | <i>Latitude</i> |
|--|--|--|
| Munitions. | Women. Boys over 14. Girls over 16. | As in 1914. |
| Woolen and worsted (from May). | Women and young persons. | 6 hours weekly overtime, in 2-hour shifts on 3 days or 1½ hours on 4 days. No overtime on Saturday. |
| Weaving (July-Nov.). | Women and young persons over 16. | 8 hours weekly overtime in 2-hour shifts on 4 days. |
| Hosiery. | Protected persons. | 1½ hours overtime on 4 days, or 1 hour on 5 days, but not on Saturday or Sunday. |
| Cotton. | Protected persons. | 6 hours overtime weekly. |
| Margarine. | Not stated. | Not stated. |
| Window shades. | Not stated. | Not stated. |
| Flax. | Not stated. | Not stated. |
| Rope walks. | Not stated. | 6 hours overtime weekly. |
| Bleach and dye works (surgical dressings; raising and finishing flannelette). | Not stated. | 6 hours overtime weekly. |
| Tanning and currying. | Women. Boys over 14. | 4 hours overtime weekly. |
| Canvas equipment. | Not stated. | 5 hours overtime weekly. |
| Shipbuilding. | Boys over 14. | (a) Overtime, 5 hours a week for boys under 16; 7½ hours for those over 16. (b) Eight-hour shifts. (c) Day and night shifts. |
| Bread baking. | (a) Boys 17. (b) Boys 15 and over. | (a) Night shift (not exceeding 9 hours). (b) Any period of 9 hours between 4 a.m. and 8 p.m. |
| Pastry baking (Scotland). | (a) Women and boys of 17. (b) Boys 15 and over. | (a) Night shift (not exceeding 9 hours). (b) Any period of 9 hours between 4 a.m. and 8 p.m. |
| Chocolate.* | Women. | When necessary, on account of hot weather, between 6 a.m. and 10 p.m. for two spells of 4 hours each, one in the morning and one in the afternoon. |
| Leather equipment.* | Women and young persons over 16. | Overtime 1½ hours per day. |
| Aerated waters.* | Women. | Extension of overtime allowed by S. 49. |
| Glass. | Boys over 13 (educationally qualified). | Extension of S. 55. |

* The order expired and was not renewed.

| <i>Industry</i> | <i>Persons Affected</i> | <i>Latitude</i> |
|--|-------------------------------------|--|
| Oil and cake mills. | Women and boys over 16. | 8-hour shifts, or day and night shifts. |
| Flour mills. | Women and boys over 16. | 8-hour shifts, or day and night shifts. |
| Toys and games.* | Women. | Overtime as allowed by S. 49 and night shifts during the Christmas season. |
| Dairies. | Women and young persons. | 5 hours on Sundays, with weekly limit of 60 hours. No other overtime during the week. |
| Paper mills. | Women. | 8-hour shifts, or day and night shift. |
| Pottery. | Not stated. | Suspension of certain regulations. |
| Sandbags.* | Women and young persons. | Overtime, 3 hours per week. |
| Cement (Essex and Kent). | Women. | Night shift. |
| Waterproof capes (War Office contracts).* | Women and young persons over 16. | (1) Overtime, 4½ hours per week. (2) Permission for Christians to work on Saturday and Jews on Sunday. |
| Manchester warehouses. | Women and boys over 16. | Overtime, 2 hours on not more than 4 days a week and on not more than 12 days in any 4 weeks. |
| Lace and patent net factories (processes of threading, brass bobbin winding, jacking off and stripping). | Women, girls over 16; boys over 14. | (1) Different periods of employment for different workers. (2) Where (1) is impracticable overtime 1½ hours per day, but with a weekly limit of 60 hours exclusive of meal times. |
| Non-textile works engaged on work for the Crown, or on work required in the national interest.† | Women, girls over 16; boys over 14. | Rearrangement of the statutory hours but period of employment not to exceed 14 hours on any one day, or 60 hours (exclusive of meal times) in any week. |

* The order expired and was not renewed.

† A new order, which was allowed in all non-textile works not otherwise provided for. It allowed greater elasticity than was provided by the Factory Acts, and permitted, for example, such moderate overtime during the week as could be compensated by an earlier stop on Saturdays.

Appendix J

GENERAL ORDER REGULATING OVERTIME ISSUED BY THE HOME OFFICE SEPTEMBER 9, 1916.

The following is the full text of the parts of the order applying to women :

Scheme A. (Three Shifts.)

This scheme applies to women and female young persons of 16 years of age and over, and male young persons of 14 years of age and over. Three shifts, none of which may be longer than 10 hours, may be worked in each period of 24 hours, subject to the following conditions:

(1) Each worker shall have one break of 24 hours or more in every week, or of 32 hours or more in every alternate week, or of 40 hours or more in every third week.

(2) Each worker shall have an interval of two unemployed shifts between each two shifts of employment.

(3) An interval of not less than half an hour shall be allowed if the shift is 8 hours or less, and an interval of not less than one hour if the shift is more than 8 hours.

Provided that the superintending inspector of factories may authorize, subject to compliance with condition (1) and to such other conditions as he may impose, different arrangements as regards hours of work and breaks at the week end for the purpose of changing over the shifts.

Scheme B. (Two Shifts.)

This scheme applies to women and female persons of 16 years of age and over and male young persons of 14 years of age and over, provided that the employment in the night shift of girls under 18 or boys under 16 years of age shall be subject in each case to the approval of the superintending inspector of factories. Two shifts of 12 hours each may be worked, subject to the following conditions:

(1) No person shall be employed more than 6 turns by day or more than 6 turns by night in any week.

(2) Unless otherwise sanctioned by the superintending inspector no person shall be employed on Sunday except in a night shift commencing on Sunday evening or ending on Sunday morning.

(3) The total hours worked per week (exclusive of meal times) shall not exceed 60 provided that in the case of male young persons 16 years of age and over the total hours worked per week (exclusive of meal times) may be 63.

(4) Intervals for meals amounting to not less than 1½ hours shall be allowed in the course of each shift, of which in the case of the night shift one-fourth of an hour or more shall be allowed as a break within 4 hours of the end of the shift.

(5) Each worker shall have an interval of one unemployed shift between each two shifts of employment.

Providing that the superintending inspector may authorize, subject to such conditions as he may impose, a system of one long shift, not exceeding 13 hours with a corresponding reduction in the other shift, so that the average weekly total of hours shall not exceed the limits specified above in paragraph (3).

Scheme C. (Rearrangement of Statutory Hours.)

This scheme applies to women and female young persons of 16 years of age and over, and male young persons of 14 years of age and over.

In the case of such women and young persons the hours of work and intervals for meals allowed by the (factory and workshop) act may be arranged, subject to the following conditions:

(a) The total hours worked per week (exclusive of intervals for meals) shall not exceed 60.

(b) The daily period of employment (including overtime and intervals for meals)—

(1) Shall not commence earlier than 6 a.m. or end later than 10 p.m.

(2) Shall not exceed 14 hours.

(c) Intervals for meals amounting to not less than $1\frac{1}{2}$ hours shall be allowed during the period of employment, with an additional half an hour if the period of employment is more than $13\frac{1}{2}$ hours.

(d) No overtime shall be worked on Saturday.

Naval Ship Repairing Work.

In cases of special emergency women, female young persons of 16 years of age and over, and male young persons of 14 years of age and over, employed on repair work for His Majesty's ships may be employed for special hours on any day of the week on the express instructions of the senior naval officer in charge and subject to such conditions as he may lay down as regards intervals for meals and rest, provided that in any case—

(1) No male young person over 16 years of age shall be employed for more than $67\frac{1}{2}$ hours in the week (exclusive of intervals for meals and rest).

(2) No other young person or woman shall be employed for more than 65 hours in the week (exclusive of intervals for meals and rest).

Miscellaneous Provisions.

No woman or young person shall be employed continuously at any time for more than five hours without an interval of at least half an hour, except that where not less than one hour is allowed for dinner, an afternoon spell of six hours may be worked, with an interval of quarter of an hour only for tea, if the factory inspector is satisfied that adequate provision is made for the worker to obtain tea in the works and for tea to be actually ready for them as soon as they stop work.

If work commences before 8 a.m. and no interval is allowed for breakfast, an opportunity shall be given to take refreshment during the morning.

A woman or young person shall not be allowed to lift, carry, or move anything so heavy as to be likely to cause injury to the woman or young person.

Different schemes of employment may be adopted and different intervals for meals fixed for different sets of workers.

Employment on night shifts shall be subject to the provision, to the satisfaction of the factory inspector, of proper facilities for taking and cooking meals, and in the case of female workers, for their supervision by a welfare worker or a responsible forewoman.

Circular letter 198802 to accompany Home Office Order of Sept. 9, 1916.

No requirement is laid down in the order that workers on the night shift shall change periodically to the day shift. The matter is left to the individual employers to determine in consultation with their work-people. Care should be taken in selecting women and young persons for night work. They should not be put on night work indiscriminately.

Appendix K

DISTRIBUTION OF YOUNG PERSONS BETWEEN DIFFERENT EMPLOYMENTS IN JULY, 1914, OCTOBER, 1917, AND JANUARY, 1918

(Compiled from Ministry of Reconstruction, *Juvenile Employment during the War and After*, pp. 10, 11, 77.)

| | Total Boys and Girls Under 18 | | | Total Boys Under 18 | | | Total Girls Under 18 | | |
|---|---------------------------------------|--|--|---------------------------------------|--|--|---------------------------------------|--|--|
| | Estimated numbers employed Oct., 1917 | Estimated numbers employed in Jan., 1918 | Increase or decrease July, 1914-Jan., 1918 | Estimated numbers employed Oct., 1917 | Estimated numbers employed in Jan., 1918 | Increase or decrease July, 1914-Jan., 1918 | Estimated numbers employed Oct., 1917 | Estimated numbers employed in Jan., 1918 | Increase or decrease July, 1914-Jan., 1918 |
| Building | 50,000 | 48,000 | - 12,300 | 44,000 | 42,000 | - 17,000 | 6,000 | 6,000 | + 4,700 |
| Mines and Quarries | 168,000 | 178,000 | + 11,300 | 164,000 | 174,000 | + 9,000 | 4,000 | 4,000 | + 2,250 |
| Metal Trades | 404,000 | 409,000 | + 173,800 | 296,000 | 303,000 | + 113,000 | 108,000 | 106,000 | + 60,800 |
| Chemical Trades | 47,000 | 48,000 | + 22,300 | 22,000 | 22,000 | + 7,500 | 25,000 | 26,000 | + 14,850 |
| Textile Trades | 329,000 | 324,000 | - 15,000 | 116,000 | 114,000 | - 10,000 | 213,000 | 210,000 | - 5,000 |
| Food, Drink and Tobacco | 96,000 | 96,000 | + 7,200 | 43,000 | 43,000 | + 3,000 | 53,000 | 53,000 | + 4,200 |
| Clothing Trades | 169,000 | 169,000 | - 19,600 | 45,000 | 45,000 | - 3,000 | 124,000 | 124,000 | - 16,550 |
| Paper and Printing | 75,000 | 74,000 | - 11,700 | 30,000 | 30,000 | - 10,000 | 45,000 | 44,000 | - 1,750 |
| Wood Trades | 54,000 | 55,000 | + 10,000 | 34,000 | 34,000 | - 500 | 20,000 | 21,000 | + 10,500 |
| Other Industries | 80,000 | 81,000 | + 10,000 | 43,000 | 44,000 | - 1,000 | 37,000 | 37,000 | + 11,000 |
| Industries Total | 1,472,000 | 1,482,000 | + 176,000 | 837,000 | 851,000 | + 91,000 | 635,000 | 631,000 | + 85,000 |
| Municipal gas, water, electricity .. | 4,000 | 3,500 | + 2,000 | 3,000 | 3,000 | + 1,500 | 1,000 | 500 | + 300 |
| Government establishments | 32,000 | 30,000 | + 27,000 | 22,000 | 21,000 | + 18,000 | 10,000 | 9,000 | + 9,000 |
| Agriculture | 136,000 | 130,000 | - 9,000 | 118,000 | 113,000 | - 14,000 | 18,000 | 17,000 | + 5,000 |
| Transport | 101,500 | 102,500 | + 25,100 | 89,500 | 90,500 | + 14,400 | 12,000 | 12,000 | + 10,700 |
| Finance and commerce | 427,000 | 416,000 | + 94,000 | 224,000 | 216,000 | - 22,500 | 203,000 | 200,000 | + 116,500 |
| Professional occupations | 29,000 | 27,000 | + 8,000 | 18,000 | 17,000 | + 3,000 | 11,000 | 10,000 | + 5,000 |
| Hotels, cinemas, theaters | 30,000 | 32,000 | + 7,000 | 17,000 | 19,000 | + 6,500 | 13,000 | 13,000 | + 500 |
| Post Office | 24,000 | 23,000 | - 4,000 | 10,000 | 9,000 | + 7,800 | 14,000 | 14,000 | + 3,800 |
| Other civil service | 13,500 | 14,500 | + 11,400 | 4,500 | 4,500 | + 1,500 | 9,000 | 10,000 | + 9,900 |
| Local government (including education, but excluding Municipal trams, water, gas, electricity) .. | 18,000 | 17,500 | + 4,500 | 10,000 | 10,000 | + 2,400 | 8,000 | 7,500 | + 2,100 |
| Grand Total | 2,287,000 | 2,278,000 | + 342,000 | 1,353,000 | 1,354,000 | + 94,000 | 934,000 | 924,000 | + 248,000 |

Appendix L

POSTWAR EMPLOYMENT

(Tables Compiled from *Labour Gazette*, May, 1919, pp. 287-288; October, p. 418; November, p. 473.)

1. Number of Out-of-Work Donation Policies Outstanding Weekly for Ten Months of 1919.

| Week Ending | Civilians | | | | | Demobilized Members of H. M. Forces | | | |
|----------------------|-----------|--------|---------|--------|---------|-------------------------------------|-------|---------|-------------|
| | Men | Boys | Women | Girls | Total | Men | Women | Total | Grand Total |
| Jan. 3 | 101,390 | 16,988 | 224,955 | 13,374 | 356,707 | 23,938 | 50 | 23,988 | 380,695 |
| Jan. 10 | 119,315 | 16,462 | 265,479 | 16,365 | 417,621 | 31,543 | 88 | 31,631 | 449,252 |
| Jan. 17 | 139,113 | 18,131 | 303,813 | 18,018 | 479,075 | 40,400 | 131 | 40,531 | 519,606 |
| Jan. 24 | 156,671 | 20,543 | 343,742 | 22,259 | 543,215 | 47,209 | 170 | 47,379 | 590,594 |
| Jan. 31 | 177,361 | 22,562 | 399,864 | 25,362 | 625,149 | 53,316 | 238 | 53,554 | 678,703 |
| Feb. 7 | 191,371 | 24,538 | 427,734 | 26,790 | 670,433 | 63,277 | 380 | 63,657 | 734,090 |
| Feb. 14 | 212,205 | 26,752 | 452,810 | 28,183 | 719,950 | 84,298 | 394 | 84,692 | 804,642 |
| Feb. 21 | 218,278 | 28,195 | 470,294 | 31,544 | 748,311 | 132,471 | 841 | 133,312 | 881,623 |
| Feb. 28 | 227,836 | 28,019 | 494,471 | 32,037 | 782,363 | 165,429 | 828 | 166,257 | 948,620 |
| Mar. 7 | 234,402 | 27,356 | 494,365 | 34,398 | 790,521 | 200,636 | 1,025 | 201,711 | 992,232 |
| Mar. 14 | 208,540 | 26,327 | 485,784 | 31,070 | 751,721 | 235,737 | 1,161 | 237,898 | 988,619 |
| Mar. 21 | 207,973 | 27,567 | 474,452 | 28,082 | 738,074 | 264,257 | 995 | 265,252 | 1,003,326 |
| Mar. 28 | 209,486 | 26,461 | 488,655 | 29,380 | 753,982 | 305,251 | 1,012 | 306,263 | 1,060,245 |
| Apr. 4 | 214,263 | 26,148 | 469,550 | 30,189 | 740,155 | 336,570 | 961 | 337,531 | 1,077,686 |
| Apr. 11 | 217,538 | 26,093 | 455,736 | 30,134 | 729,501 | 347,895 | 917 | 348,812 | 1,078,313 |
| Apr. 18 | 210,119 | 23,882 | 452,144 | 29,279 | 715,424 | 369,992 | 1,013 | 371,005 | 1,086,429 |
| Apr. 25 | 215,687 | 23,679 | 443,941 | 28,964 | 712,271 | 379,799 | 1,258 | 381,057 | 1,093,328 |
| May 2 | 214,761 | 23,040 | 422,890 | 29,242 | 689,933 | 402,151 | 1,316 | 403,467 | 1,093,400 |
| May 9 | 191,651 | 19,175 | 366,536 | 20,871 | 598,233 | ..... | ..... | 409,959 | 1,008,192 |
| May 16 | 178,284 | 16,845 | 312,373 | 17,023 | 524,525 | ..... | ..... | 403,356 | 927,881 |
| May 23 | 164,569 | 14,988 | 250,010 | 14,869 | 444,436 | ..... | ..... | 402,036 | 846,472 |
| May 30 | 150,250 | 12,912 | 207,897 | 13,231 | 384,290 | ..... | ..... | 386,921 | 771,211 |
| June 6 | 135,317 | 10,405 | 169,621 | 9,880 | 325,223 | ..... | ..... | 385,652 | 710,875 |
| June 13 | 123,134 | 8,439 | 146,578 | 7,910 | 286,061 | ..... | ..... | 378,768 | 664,829 |
| June 20 | 116,158 | 7,551 | 132,649 | 7,491 | 263,849 | ..... | ..... | 381,247 | 645,096 |
| June 27 | 106,661 | 6,615 | 113,462 | 6,544 | 233,282 | ..... | ..... | 372,843 | 606,125 |
| July 4 | 100,270 | 5,905 | 100,576 | 6,077 | 212,828 | ..... | ..... | 366,197 | 579,025 |
| July 11 | 96,472 | 5,341 | 91,413 | 6,155 | 199,381 | ..... | ..... | 365,768 | 565,149 |
| July 18 | 92,762 | 4,985 | 83,755 | 5,707 | 187,209 | ..... | ..... | 362,982 | 550,191 |
| July 25 | 93,828 | 5,226 | 72,813 | 5,354 | 177,221 | ..... | ..... | 363,663 | 540,884 |
| Aug. 1 | 100,228 | 6,529 | 73,878 | 6,176 | 186,811 | ..... | ..... | 366,671 | 553,482 |
| Aug. 8 | 98,298 | 6,245 | 64,029 | 5,673 | 174,245 | ..... | ..... | 362,741 | 536,986 |
| Aug. 15 | 94,863 | 6,669 | 61,065 | 6,093 | 168,690 | ..... | ..... | 361,833 | 530,523 |
| Aug. 22 | 92,345 | 6,267 | 55,526 | 5,182 | 159,320 | ..... | ..... | 358,755 | 510,075 |
| Aug. 29 | 83,035 | 5,006 | 49,038 | 4,053 | 141,132 | ..... | ..... | 336,952 | 478,084 |
| Sept. 5 | 72,113 | 4,008 | 40,701 | 3,041 | 119,863 | ..... | ..... | 326,751 | 446,614 |
| Sept. 12 | 66,586 | 3,236 | 36,230 | 2,471 | 108,623 | ..... | ..... | 311,959 | 420,582 |
| Sept. 19 | 63,557 | 3,111 | 34,448 | 2,334 | 103,450 | ..... | ..... | 305,253 | 408,703 |
| Sept. 26 | 62,435 | 3,151 | 32,915 | 2,230 | 100,731 | ..... | ..... | 302,272 | 403,003 |
| Oct. 17 ¹ | 70,589 | 4,371 | 29,622 | 2,586 | 107,168 | ..... | ..... | 337,948 | 445,116 |
| Oct. 24 | 86,036 | 6,551 | 30,396 | 2,672 | 125,655 | ..... | ..... | 343,672 | 469,327 |
| Oct. 31 | 94,058 | 7,349 | 30,940 | 2,838 | 135,185 | ..... | ..... | 344,242 | 479,427 |

¹ Figures for Oct. 3 and 10, on account of special arrangements made during the railway strike of these weeks, are not given.

2. Number of Unemployed Women and Girls by Industries.
a. In Insured Industries.

| Trade | Number Insured | Number Unemployed | Number Unemployed |
|--|------------------|-------------------|-------------------|
| | January 12, 1919 | April 25, 1919 | October 31, 1919 |
| Building | 6,152 | 950 | 55 |
| Construction of Works | 1,825 | 46 | 1 |
| Shipbuilding | 8,810 | 522 | 21 |
| Engineering and Ironfounding..... | 419,524 | 35,614 | 1,426 |
| Construction of Vehicles | 17,577 | 6,336 | 107 |
| Sawmilling | 812 | 331 | 17 |
| Other | 171 | 1 | .... |
| Total Insured Under Act of 1911..... | 454,871 | 43,800 | 1,627 |
| Iron and Steel Manufacture..... | 12,805 | 400 | 18 |
| Tinplate Manufacture | 3,550 | 92 | 23 |
| Wire Manufacture | 9,431 | 828 | 46 |
| Anchors, Chains, Nails, Bolts, Nuts, Rivets, etc.... | 12,690 | 2,888 | 162 |
| Brass | 8,413 | 219 | 6 |
| Copper, Tin, Lead, Zinc, etc. | 10,561 | 738 | 62 |
| Hardware and Hollowware | 49,749 | 5,437 | 228 |
| Tools, Files, Saws, Implements, Cutlery..... | 6,432 | 827 | 64 |
| Clocks, Plate, Jewelry | 6,175 | 388 | 27 |
| Needles, Pins, Typefounding, Dyes, etc. | 6,664 | 336 | 15 |
| Electrical, Scientific, etc., Appliances and Apparatus | 28,866 | 2,152 | 151 |
| Miscellaneous Metal | 5,185 | 1,455 | 70 |
| Ammunition and Explosives | 197,128 | 5,818 | 100 |
| Chemicals | 34,071 | 2,631 | 193 |
| Leather and Leather Goods..... | 31,313 | 2,679 | 162 |
| Brick, Tile and Artificial Building Material..... | 9,804 | 1,172 | 59 |
| Sawmilling, Machined Woodwork and Wooden Cases | 30,176 | 2,049 | 51 |
| Rubber and Manufactures Thereof..... | 35,319 | 2,369 | 151 |
| Total insured Under Act of 1916..... | 496,332 | 32,478 | 1,595 |
| Grand Total | 951,203 | 76,278 | 3,222 |

b. In Uninsured Industries.

| Trade | Number of Policies of Women and Girls Remaining Lodged | |
|--|--|------------------|
| | April 25, 1919 | October 31, 1919 |
| Agriculture | 1,956 | 152 |
| Conveyance of Men, Goods and Messages..... | 11,932 | 962 |
| Mines and Quarries | 982 | 78 |
| Cotton | 81,635 | 1,171 |
| Woolen and Worsted | 4,670 | 162 |
| Other Textiles, including Printing, Dyeing, etc..... | 35,835 | 1,951 |
| Commercial | 24,124 | 8,616 |
| Food, Drink and Tobacco..... | 19,926 | 1,818 |
| Dress | 26,319 | 2,924 |
| Domestic Offices and Services..... | 84,529 | 7,348 |
| General Laborers, Factory Workers, etc..... | 56,900 | 3,740 |
| Other Uninsured Industries | 48,877 | 5,632 |
| Total | 397,885 | 34,554 |

Appendix M.

List of trades in which women have been substituted for men during the war, but "which from their nature and other conditions of work appear in the main unsuitable for female labor in normal times."

(Compiled from the British Home Office report on the "Substitution of Women in Nonmunition Factories during the War," pp. 16-26.)

| | |
|------------------------|--------------------------------|
| Sawmilling | Rope and Binder Twine |
| Wood Wool Manufacture | Heavy Edge Tools |
| India Rubber | Scythes and Sickles |
| Heavy Chemicals | Wire Ropes (heavy) |
| Oil and Seed Crushing | Shale Oil Refining |
| Glasshouse processes | Cement Manufacture |
| Flint Glass | (most processes) |
| Glass Bottles | Feltmongering |
| Papermaking | Matting |
| Flour and Corn Milling | Linoleum Manufacture (except a |
| Sugar Refining | few light processes) |
| Gas Manufacture | Paints and colours |
| | China and earthenware |

Appendix N

AVERAGE WAGES OF WOMEN AND GIRLS IN NON-MUNITION TRADES IN THE UNITED KINGDOM.

(Calculated from Monthly Returns made by Employers to the Department of Labour Statistics.)¹

| LAST WHOLE WEEK IN EACH MONTH. | | | | | | | | | | | | | |
|--------------------------------|--------------------------|------------------|--------------------|--------------------|------------------|--------------------|--------------------|------------------|--------------------|--------------------|------------------|-------|-------|
| Industry | Ordinary week in 1900 | May-Aug. 1916 | Sept.-Dec. 1915 | Jan.-April 1916 | May-Aug. 1916 | Sept.-Dec. 1916 | Jan.-April 1917 | May-Aug. 1917 | Sept.-Dec. 1917 | Jan.-April 1918 | May-Aug. 1918 | | |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Cotton | 16 2 | 17 1 | 17 0 | 17 11 | 18 4 | 18 9 | 19 7 | 20 7 | 21 5 | 23 3 | 24 1 | 24 1 | 24 1 |
| Woolen and worsted..... | 12 1 | 15 3 | 15 5 | 16 1 | 16 8 | 17 11 | 19 8 | 19 9 | 21 9 | 22 8 | 25 3 | 25 3 | 25 3 |
| Linen | 9 9 | 10 7 | 10 10 | 11 3 | 11 11 | 12 5 | 13 8 | 15 4 | 17 1 | 18 8 | 20 4 | 20 4 | 20 4 |
| Jute | 12 5 | 18 4 | 18 10 | 18 10 | 19 2 | 20 2 | 20 4 | 22 7 | 23 9 | 24 4 | 24 7 | 24 7 | 24 7 |
| Hosiery | 12 3 | 15 9 | 15 10 | 16 8 | 17 2 | 17 1 | 18 5 | 20 0 | 20 7 | 22 6 | 23 10 | 23 10 | 23 10 |
| Lace | 11 7 | 13 3 | 13 6 | 14 0 | 14 4 | 14 10 | 15 6 | 16 9 | 17 11 | 18 6 | 19 2 | 19 2 | 19 2 |
| Silk | 9 9 | 12 0 | 12 5 | 12 11 | 13 5 | 13 7 | 14 9 | 15 7 | 17 2 | 18 7 | 20 5 | 20 5 | 20 5 |
| Carpet | 11 10 | 16 8 | 16 4 | 17 1 | 17 0 | 17 5 | 18 9 | 20 4 | 21 3 | 22 11 | 24 4 | 24 4 | 24 4 |
| Bleaching, etc. | 11 0 | 14 5 | 15 0 | 15 7 | 15 9 | 17 3 | 18 6 | 20 10 | 22 3 | 23 10 | 24 9 | 24 9 | 24 9 |
| Boot and shoe..... | 10 6 | 15 4 | 14 10 | 14 7 | 16 3 | 16 7 | 17 6 | 19 6 | 20 6 | 22 3 | 22 10 | 22 10 | 22 10 |
| Shirt and collar | 11 4 | 13 7 | 13 7 | 14 1 | 14 7 | 14 10 | 15 9 | 17 2 | 18 3 | 19 11 | 21 5 | 21 5 | 21 5 |
| Ready-made tailoring | 10 10 | 15 2 | 14 2 | 14 10 | 15 7 | 16 0 | 17 4 | 18 9 | 21 5 | 23 2 | 25 8 | 25 8 | 25 8 |
| Printing | 9 8 | 12 3 | 12 7 | 13 7 | 13 6 | 14 5 | 15 9 | 16 4 | 18 2 | 19 10 | 21 8 | 21 8 | 21 8 |
| Bookbinding | 10 2 | 12 3 | 12 8 | 13 0 | 13 0 | 14 3 | 15 2 | 16 1 | 17 11 | 19 11 | 21 6 | 21 6 | 21 6 |
| Pottery | 10 1 | 12 2 | 12 5 | 12 3 | 12 10 | 13 1 | 13 8 | 16 11 | 17 7 | 19 1 | 21 7 | 21 7 | 21 7 |
| Glass | 8 6 | 10 3 | 11 2 | 10 9 | 11 1 | 11 9 | 12 1 | 13 9 | 14 9 | 15 6 | 16 10 | 16 10 | 16 10 |
| Food preparation | 10 0 | 14 5 | 14 10 | 15 2 | 15 2 | 17 6 | 18 3 | 20 2 | 21 7 | 23 0 | 24 5 | 24 5 | 24 5 |
| Total..... | 12 8 | 14 9 | 14 10 | 15 4 | 15 10 | 16 8 | 17 8 | 19 1 | 20 5 | 21 10 | 23 6s | | |

^a Includes "Paper Making."

¹ Great Britain Ministry of Reconstruction, *Report of the Committee on Women's Employment*, p. 82.

INDEX

- Accounting, women employed in, 47.
Addison, Christopher, 140, 152.
Agriculture: employment of women in, 3, 14, 29, 33, 36, 40, 45, 47, 73; wages paid, 5, 34, 72, 117; Board of, 71, 73; efforts to substitute women's labor in, 63, 70-74; Women's Farm and Garden Union, 73; Women's National Land Service Corps, 73; Women's Land Army, 74; establishment of training courses in, 85; employment of children in, 171.
Adjustments, postwar, 215.
Aeroplanes, employment of women on work on, 35.
Airedale of Gledhow, Lord, 121.
Amalgamated Society of Engineers, 51-53, 56, 90, 100, 222.
Ammunition industry, employment of women in, 30. *See also* Munitions industry.
Anderson, Miss, 40.
Armature winding, employment of women in, 42.
Arsenals, employment of women at, 37, 60.
Aves, Ernest, 104.

Baillie, G. H., 60.
Bakers, employment of women as, 38, 42, 61.
Banks, employment of women in, 33, 39-40, 42, 45.
Bleaching, employment of women in, 61.
Bill posters, employment of women as, 42.
Billeting of Civilians Bill, 165.
Blast furnaces, employment of women in, 42.
Boot and shoe trade, employment of women in, 30, 61.
Boys, employment of. *See* Children, employment of.
Boys' Welfare Association, 184.
Brewing, employment of women in, 37.
Brick making, employment of women in, 38, 67.
British Association for Advancement of Science, 28, 32, 34, 120.
Brush making, employment of women in, 61.
Building trades, employment of women in, 38.
Butchers, employment of women as, 38.

Cement work, employment of women in, 38.
Cemetery laborers, employment of women as, 42.
Central Committee for Prevention and Relief of Distress, 21.
Central Committee on Women's Employment, 23.
Central Labor Supply Committee, 56, 101, 106.
Chauffeurs, employment of women as, 42.
Chemicals industry, employment of women in, 34, 37, 42.

Children: Fisher Education Law, iv, 12, 226; employment of, on war work, 2, 4, 17; legislation regulating employment of, 12, 18-19; compulsory schooling, 18; effects of war on employment of, 167-190; demand for labor of, 167; relaxation of child labor and compulsory education laws, 170; numbers employed, 168, 170; illegal employment of, 174; supervision of, 176; wages of, 177; hours of, 178; Boys' Welfare Association, 184; effects of work on, 185; postwar employment of, 224.
China making, employment of women in, 38, 61.
Cinema operators, employment of women as, 42.
Civil service. *See* Government work.
Civil War Workers Committee, 206.
Clerical and Commercial Employments Committee, 69-70.
Clerical work: employment of women in, 33; training courses in, 85.
Clothing industry, employment of women in, 30, 35, 42, 61, 67.
Clyde strike, 51.
Cole, G. D. H., 114.
College women in agricultural work, 73.
Comfort, legislation providing for, 7. *See also* Safety, health and comfort.
Commercial occupations, employment of women in, 29, 39, 45-46.
Competition in securing workers, efforts to avoid, 80.
Conference of Working Class Associations, 218.
Construction work, employment of women in, 42.
Control of workers: controlled establishments, 55; under Munitions Acts, 92; prohibition against strikes, 92; leaving certificates, 93.
Copper works, employment of women in, 42.
Core makers, employment of women as, 42.
Cork cutters; employment of women as, 42.
Corn Production Act, 117.
Cost of living, effect of, on wages, 112.
Cotton trade, dilution in, 61, 67.
Crane drivers, employment of women as, 42.
Cranes, electric, employment of women on, 38.
Currying, employment of women in, 67.

Delinquency, juvenile, 9, 188.
Dilution, 50-74; made possible by Munitions Act, 6, 51; "Treasury Agreement" concerning, 52; attitude of trade unions toward, 90; complete, 122; group, 123; dilution bulletins, 153; children used in,

INDEX

- Accounting, women employed in, 47.
 Addison, Christopher, 140, 152.
 Agriculture: employment of women in, 3, 14, 29, 33, 36, 40, 45, 47, 73; wages paid, 5, 34, 72, 117; Board of, 71, 73; efforts to substitute women's labor in, 63, 70-74; Women's Farm and Garden Union, 73; Women's National Land Service Corps, 73; Women's Land Army, 74; establishment of training courses in, 85; employment of children in, 171.
 Adjustments, postwar, 215.
 Aeroplanes, employment of women on work on, 35.
 Airedale of Gledhow, Lord, 121.
 Amalgamated Society of Engineers, 51-53, 56, 90, 100, 222.
 Ammunition industry, employment of women in, 30. *See also* Munitions industry.
 Anderson, Miss, 40.
 Armature winding, employment of women in, 42.
 Arsenals, employment of women at, 37, 60.
 Aves, Ernest, 104.
 Baillie, G. H., 60.
 Bakers, employment of women as, 38, 42, 61.
 Banks, employment of women in, 33, 39-40, 42, 45.
 Bleaching, employment of women in, 61.
 Bill posters, employment of women as, 42.
 Billeting of Civilians Bill, 165.
 Blast furnaces, employment of women in, 42.
 Boot and shoe trade, employment of women in, 30, 61.
 Boys, employment of. *See* Children, employment of.
 Boys' Welfare Association, 184.
 Brewing, employment of women in, 37.
 Brick making, employment of women in, 38, 67.
 British Association for Advancement of Science, 28, 32, 34, 120.
 Brush making, employment of women in, 61.
 Building trades, employment of women in, 38.
 Butchers, employment of women as, 38.
 Cement work, employment of women in, 38.
 Cemetery laborers, employment of women as, 42.
 Central Committee for Prevention and Relief of Distress, 21.
 Central Committee on Women's Employment, 23.
 Central Labor Supply Committee, 56, 101, 106.
 Chauffeurs, employment of women as, 42.
 Chemicals industry, employment of women in, 34, 37, 42.
 Children: Fisher Education Law, iv, 12, 226; employment of, on war work, 2, 4, 17; legislation regulating employment of, 12, 18-19; compulsory schooling, 18; effects of war on employment of, 167-190; demand for labor of, 167; relaxation of child labor and compulsory education laws, 170; numbers employed, 168, 170; illegal employment of, 174; supervision of, 176; wages of, 177; hours of, 178; Boys' Welfare Association, 184; effects of work on, 185; postwar employment of, 224.
 China making, employment of women in, 38, 61.
 Cinema operators, employment of women as, 42.
 Civil service. *See* Government work.
 Civil War Workers Committee, 206.
 Clerical and Commercial Employments Committee, 69-70.
 Clerical work: employment of women in, 33; training courses in, 85.
 Clothing industry, employment of women in, 30, 35, 42, 61, 67.
 Clyde strike, 51.
 Cole, G. D. H., 114.
 College women in agricultural work, 73.
 Comfort, legislation providing for, 7. *See also* Safety, health and comfort.
 Commercial occupations, employment of women in, 29, 39, 45-46.
 Competition in securing workers, efforts to avoid, 80.
 Conference of Working Class Associations, 218.
 Construction work, employment of women in, 42.
 Control of workers: controlled establishments, 55; under Munitions Acts, 92; prohibition against strikes, 92; leaving certificates, 93.
 Copper works, employment of women in, 42.
 Core makers, employment of women as, 42.
 Cork cutters; employment of women as, 42.
 Corn Production Act, 117.
 Cost of living, effect of, on wages, 112.
 Cotton trade, dilution in, 61, 67.
 Crane drivers, employment of women as, 42.
 Cranes, electric, employment of women on, 38.
 Currying, employment of women in, 67.
 Delinquency, juvenile, 9, 188.
 Dilution, 50-74; made possible by Munitions Act, 6, 51; "Treasury Agreement" concerning, 52; attitude of trade unions toward, 90; complete, 122; group, 123; dilution bulletins, 153; children used in,

- 175; return of soldiers to former positions, 221; postwar results of, 215; table showing processes on which women were employed, 232; extent of, in December, 1915, and April, 1916, 235; numbers substituted, April, 1916-April, 1918, 236; table of direct substitution, January and April, 1918, 238; table showing average weekly earnings, 239; list of trades in which women have been substituted but which appear unsuitable in normal times, 248. *See also* Substitution.
- Diseases, occupational: munitions work, 154.
- Distress, Central Committee for Prevention and Relief of, 21.
- Distribution of young persons between different employments in July, 1914, October, 1917, and January, 1918, 245.
- Docks, employment of women at, 37.
- Domestic service: employment of women in, 3, 14, 29, 36, 38, 42; postwar problems of, 213; wages, 213.
- Donation system for unemployed after the war, 10, 208, 211.
- Dressmaking trade: employment of women in, 14, 36, 38; wages, 118.
- Dyeing industry, employment of women in, 61.
- Earthenware making, employment of women in, 38, 61.
- Educational work: employment of women in, 29, 47; National Federation of Women Teachers, 88. *See also* Schooling.
- Effects of war work: signs of injury to health not generally apparent, 8; on children, 9, 167, 190; on home life, 9, 199; increase in juvenile delinquency, 9, 188; on women, 191-203; development of personality, 9, 200.
- Efficiency, relative, of men and women workers, 120.
- Efforts, organized, to recruit women's labor, 50.
- Electric motor building, employment of women in, 38.
- Electric welding, employment of women in, 42.
- Engine cleaners, employment of women as, 42.
- Engineering industry: employment of women in, 30; restrictions against employment of women, 51; dilution introduced in, 56-61; Committee on Production in Engineering, 51.
- Equal pay question, 119; postwar problems regarding, 215.
- Extension of employment of women, 28; tables showing, 29, 236; voluntary registration, 65.
- Fabian Society, 21.
- Fabian Women's Group, 214.
- Factory work, employment of women in, 29.
- Farm and Garden Union, Women's, 73.
- Farm work. *See* Agriculture.
- Federation of Women Workers, 96.
- Fisher, Herbert, 2, 169-170.
- Fisher Education Act, iv, 12, 226.
- Flour making, 67.
- Food industry, employment of women in, 35, 38.
- Food Production, Department of, 73.
- Forge works, employment of women in, 42.
- Foundry work, employment of women in, 42.
- Furniture manufacturing, employment of women in, 38.
- Gardeners, employment of women as, 42.
- Garrod, H. W., 161.
- Gas meter inspectors, employment of women as, 42.
- Gas works, employment of women in, 40.
- Gauging tools, employment of women in, 38.
- General Federation of Trades Unions, 20.
- Girls, employment of. *See* Children, employment of.
- Glass decorating, employment of women in, 61.
- Glass making, employment of women in, 38, 42.
- Government work, employment of women in, 14, 29, 39-40, 47-48.
- Grain milling, employment of women in, 37.
- Health Insurance Medical Research Committee, 198.
- Health of women war workers, 191; legislation protecting, 7, 16, 19. *See also* Safety, health and comfort.
- Health of Munition Workers Committee, 8, 82, 135, 146-147, 178, 182-183, 191.
- Hat making, employment of women in, 61.
- Hay balers, employment of women as, 42.
- Home life, effects of war work on, 199.
- Hosiery industry, employment of women in, 30, 61.
- Hotels, employment of women in, 29, 45.
- Hours: legislation concerning, 7, 16; for children, 19, 178; in workrooms established to relieve unemployment, 26; chapter on, 126-145; prewar legislation regarding, 126; demand for overtime, 126; in munitions industry, 127; working hours in 1915, 129; establishment of shifts, 130; complaints against overtime, 131-134; report on effects of overtime, 134-135; control of, by Ministry of Munitions, 139; recommendations concerning, of Committee on Women's employment, 145; improvement in working conditions necessitated by, 146; increase in accidents attributed to long, 193; modification of laws concerning, 241.
- Housing conditions: establishment of hostels, 163; Billeting of Civilians Bill, 165.
- Howard Association of London, 9.
- Hutchins, B. L., 30.
- Illegal employment of children, 174.
- Improvement in working conditions, plans for, 39.
- Increase of women in industry, 2, 28.
- Industrial Courts Act, 217.
- Industry, employment of women in, 2, 28-29.
- Independent Labour Party, 21.
- Insurance agents, employment of women as, 42.
- Insurance offices, employment of women in, 33.
- Interdepartmental Hours of Labour Committee, 138.
- Interim Court of Arbitration, 217.

- Joint Committee of Industrial Women's Organizations, 117.
- Juvenile employment: increase of delinquency due to; 9, 188; Committee on, 170, 177, 185. *See also* Children, employment of.
- Keeling, Frederic, 17.
- Kent, A. F. Stanley, 134.
- Kitchener, Lord, 28, 139.
- Labor: control of, by Munitions Acts, 7; removal of Trade Union restrictions, 6, 50, 55; child, 17; attitude at outbreak of war, 20; attitude of women's labor organizations toward war, 20; protest against substitution, 31; agreements concerning dilution, 50-61; organized efforts to recruit women's, 50; Women's Labor Department, 73; number of orders modifying labor laws, 240; unions, *see* Trade Unions.
- Laboratory assistants, employment of women as, 42.
- Labor Advisory Committee, 54.
- Labor Regulation Department, 56.
- Labor Supply Department, 56.
- Labor Party, attitude of, at outbreak of war, 20.
- Lace making, 61.
- Lamp-lighters, employment of women as, 40.
- Land Army, 73-74, 85, 117.
- Laundry work, employment of women in, 38.
- Lawrence, Susan, 104.
- Leather industry, employment of women in, 30, 61-62, 67.
- Leaving certificates, 7, 93; injustice of, to workers, 94; opposition of trade unions to, 96; amendments regarding, 97.
- Leeson, Cecil, 9, 188.
- Legislation: Fisher Education Act, iv, 12; Munitions Acts, 7, 50-51, 54-55, 92; restricting hours, 7; providing safety, health and comfort, 7; Minimum Wage (Trades Boards) Act, 11, 216; prewar protection through, 16; prewar, concerning child labor, 17; providing compulsory schooling, 18; to avoid competition in securing workers, 80, 89, 126; Corn Production Act, 117; affecting hours, 139; Police, Factories, etc., Act of 1916, 147-150; Billeting of Civilians Bill, 165; relaxation of child labor and compulsory education laws, 170; Wages (Temporary Regulation) Bill, 217; Industrial Courts Act, 217; Restoration of Prewar Practices Act, 1919, 223; number of orders modifying labor laws, 240; modification of hour laws, 241-243.
- Lift attendants, employment of women as, 42.
- Lockouts prohibited by Munitions Act, 92.
- Lloyd George, David, 52, 54, 58-59, 101, 122.
- Lorry drivers, employment of women as, 42.
- Macarthur, Mary, 24, 289.
- Machinists, employment of women as, 42.
- Maharajah Sandia of Gwalior fund, Prince of, 166.
- Manufacturing industries, number of women engaged in before the war, 14.
- Married women, entry of, into industry, 76.
- Marine engineering, employment of women in, 42.
- Markham, Violet, 69.
- Messengers, employment of women as, 40.
- Metal trades, employment of women in, 34-35, 37, 42, 60.
- Military hospitals, employment of women in, 47.
- Military supplies, employment of women in manufacture of, 42.
- Millers, wages of, 118.
- Minimum Wage (Trades Boards) Act, 11.
- Mining, employment of women in, 38.
- Mistresses League, 214.
- Moulders, employment of women as, 42.
- Munitions Acts: of July 2, 1915, 54; First Munitions Amendment Act, 7, 55, 139; abrogation of trade union restrictions through, 50-51; control of women workers under, 92.
- Munitions work: employment of women in, 30, 32, 35, 37, 42, 49; organized efforts to recruit women's labor for, 50; efforts to increase production, 51-52; dilution, 56-61; training for, 84; governmental regulation of wages, 99; wages, 108-113; criticism of governmental fixing of wages, 110-113; hours, 127-128; diseases contracted in, 154; employment of children in, 168.
- Munitions tribunals, 7, 92, 97.
- National Advisory Committee, 56.
- National Federation of Women Teachers, 88.
- National Federation of Women Workers, 24, 87-89, 104-105.
- National Service Department, 68.
- National Union of Women Workers, 86.
- Night work, effects of, on women, 196.
- Nonessential industries, transfers of workers from, 75.
- Nonindustrial occupations, employment of women in, 33, 39.
- Nurses, demand for, 47.
- Optical instruments, women engaged in skilled work on, 38.
- Overtime work: demand for, 126; effect of, on women, 196; general order regulating, 243.
- Oxy-acetylene welders, employment of women as, 88.
- Painters, employment of women as, 42.
- Pankhurst, Mrs. 101.
- Pankhurst, Sylvia, 100.
- Paper industry, employment of women in, 35, 42.
- Parks, employment of women in, 48.
- Peace and reconstruction, problems of, 204-227.
- Phillips, Marion, 203.
- Pipe plasterers, employment of women as, 42.
- Police, Factories, etc. (Miscellaneous Provisions) Act of 1916, 147-150.
- Police women, employment of, 40.
- Postwar conditions: prevention of unemployment, 205; unemployment, 206; ad-

- justments, 215; approved trades for women, 219; employment of children, 224; table showing postwar employment, 246.
- Postwomen, employment of, 33, 42.
- Power machine operating, training courses in, 85.
- Power stations, employment of women in, 40.
- Prewar conditions: number of women and children employed, 14.
- Prewar legislative protection, 16.
- Prince of Wales, The, 21.
- Printing industry, employment of women in, 35, 42, 61.
- Professions, number of women engaged in, 14, 45, 47.
- Quarrying, employment of women in, 38.
- Queen's Work for Women Fund, 24.
- Railway service: employment of women in, 33, 39, 42, 46; agreements as to wages by unions, 115.
- Reconstruction, problems of, 204-207.
- Recruiting of new workers, 5.
- Red Cross hospitals, employment of women in, 47.
- Registration, voluntary, 63-64, 69.
- Relief, Central Committee for, 21.
- Restoration of Prewar Practices Act, 1919, 223.
- Rhondda, Lady, 222.
- Rowntree B. Seebohm, 149, 156.
- Royal Ordnance Factories Trade Lads' Association, 184.
- Safety, health and comfort: legislation providing for, 7, 16; organized efforts for, 147; Police, Factories, etc., Act of 1916, 147-150; occupational diseases contracted in munitions work, 154; welfare supervision, 155; attack on welfare movement, 158; improvements in conditions outside factory, 161; provisions for children, 182.
- Sawmill laborers, employment of women as, 42.
- Scavengers, employment of women as, 40.
- Schooling: Fisher Education Act, iv, 12, 226; legislation providing compulsory, 18; relaxation of compulsory education laws, 170.
- Schools, training, establishment of, 84.
- Scientific instrument making, employment of women in, 61.
- Sewage farms, employment of women at, 40.
- Sheet metal working, employment of women in, 42.
- Shipbuilding, Committee on Production in Engineering and, 51.
- Ship engineering, employment of women in, 42.
- Shipyards, employment of women in, 38, 42.
- Shoe trade: employment of women in, 30; training courses in, 85.
- Shops Committee, 69.
- Smith, Constance, 186.
- Society of Incorporated Accountants, 47.
- Solderers, employment of women as, 42; voluntary registration, 63-64, 69.
- Sources of workers: transfers from non-essential industries, 75; transfers between districts, 79.
- Special Arbitration Tribunal, 104, 106, 109, 125.
- Spelter works, employment of women in, 42.
- Steel works, employment of women in, 38.
- Stokers, employment of women as, 38.
- Street cleaners, employment of women as, 40.
- Street traders, child, 4.
- Strikes prohibited by Munitions Act, 92.
- Substitution: in munitions work, 3; "equal pay" principle, 5; protest of labor unions against, 31; total number of women substituted for men workers, 40; objections to, 41; substitution officers, 68. *See also* Dilution.
- Sweated labor, government provision against, 101.
- Sweated trades, wage fixing in, 113.
- Tables: extension of employment of women during four years of war, 29; increase or decrease in number of women employed since July, 1914, 39; extension of employment of females in industry during four years of war, 44; number of women engaged on government orders in private concerns, April, 1917, and April, 1918, 45; increase in employment of women in commerce, July, 1914-April, 1918, and percentage of firms reporting a shortage of female labor in April, 1918, 46; number of females employed by steam railways, 46; number of females employed by government departments, 48; prewar occupations of 444,137 females insured against unemployment in January, 1917, 79; number of Women Trade Union members, 88; *see also* "Appendices," 229-249.
- Tailors' pressers, employment of women as, 42.
- Teachers, women, 47; National Federation of, 88.
- Technical schools, establishment of, 84.
- Telephone repairers, employment of women as, 42.
- Tennant, Mrs. A. J., 69.
- Testing dynamometers, employment of women in, 38.
- Textile industry: employment of women in, 14, 35, 38, 42, 61, 65; organized workers in, 87.
- Theaters, employment of women in, 29, 45.
- Tinsmiths, employment of women as, 42.
- Tobacco industry, employment of women in, 61.
- Toy making, training for, 85.
- Trades, approved, for women after the war, 219.
- Trades Boards: Minimum Wage Act, 11, 216; wage fixing by, 113.
- Trade League, Women's, 87, 105.
- Trade Unions: General Federation of, 20; restrictions of, removed, by Munitions Acts, 50, 55; "Treasury Agreement," 52-53; agreements allowing dilution, 61; women and the, 87; women not admitted to some, 87; increase of women members, 87; number of women members in, 88; reasons for growth of women members in, 89; difficulties to interest women in, 89; postwar effect on

- number of women members in, 91; opposition of, to leaving certificates, 96; agreements effecting wage changes, 114.
- Trades Union Congress, 20.
- Training: establishment of training centers, 84; for unemployed women, 210.
- Tramway service, employment of women in, 39, 42.
- Transferred workers, 81-82.
- Transfers of workers: from nonessential industries, 75; from domestic service, 76; between districts, 79.
- Transport work, employment of women in, 29, 39-40, 45.
- Transportation problems of workers, 162.
- "Treasury Agreement," 52-56; wage regulations contained in, 100, 110; arrangements for fulfilment of pledges in, by Restoration of Prewar Practices Act, 223.
- Tuberculosis, increase in, among women, 198.
- Unemployment: postwar, 10; donation system, 10, 208, 211; proportion of occupied to unoccupied women before the war, 14; at outbreak of war, 21; efforts to relieve, 23; prewar occupations of women insured against, 79; of children, 167, 225; prevention of postwar, 205; training courses to relieve, 210.
- Violations of Munitions Acts, penalties for, 55.
- Vocational courses, establishment of, 85.
- "Waacs," 4, 48, 69.
- Wages: raises in, due to war conditions, 4; "equal pay" principle, 5, 100, 119; effects of peace on, 11; Minimum Wage (Trades Boards) Act, 11, 216; prewar, 15, 18; legislation governing prewar, 16; of children, 18, 117; in workrooms established to relieve unemployment, 26; fear of trade unions that employment of women would undercut rates of, 31-32; in agriculture, 34, 72, 117; dilution, 62, 64; chapter on, 99-125; fixing of, 99, 102-104, 106-108, 113; governmental provision against sweated labor, 101; Special Arbitration Tribunal, 104; for woodworkers, 108; effect of cost of living on, 112; changes under trade union agreements, 114; settlement of disputes, 125; postwar, 209, 215; Interim Court of Arbitration, 217; Industrial Courts Act, 217; Wages (Temporary Regulation) Bill, 217; recommendations concerning postwar, 220; table showing average weekly earnings, 239; table showing average wages of women and girls in nonmunitions trades, 249.
- Waiters Union, admission of women to, 90.
- War Cabinet Committee on Women in Industry, iv.
- War Emergency Workers National Committee, 23, 26, 63.
- War Register, 64-65.
- Webb, Sidney, 15, 18.
- Webb, Mrs. Sidney, iv, 110, 113, 116, 169, 220.
- Welfare work: "outside welfare officers," 6; legislation providing for, 8; for transferred workers, 81-83; improvements in working conditions result of, 146-166; welfare supervision, 155; attacks on, 158; supervision of children, 176; outside of working hours, 199.
- "Whitley" industrial councils, 222.
- Woman's Freedom League, 63.
- Woman's Army Auxiliary Corps, 48.
- Women's Cooperative Guild, 65.
- Women's Industrial Council, 214.
- Women's National Land Service Corps, 73.
- Woodcutting, employment of women in, 42.
- Wood trades, employment of women in, 42.
- Woodworking industry, employment of women in, 34-35, 37, 61; wage awards, 108.
- Woolen and worsted industry, employment of women in, 30, 61.
- Woolwich Arsenal, employment of women in, 60; welfare work in, 66.
- Working Class Associations, conference of, 218.
- "Wrafs," 4, 48.
- "Wrens," 4, 48.
- Young Women's Christian Association, iii, 65.