

# INDUSTRIAL RELATIONS

## Trade Union Organisations



**I**N order to protect itself against reduction in its standard of living, labour is being led to group itself in stronger and more comprehensive organisations. As examples of this tendency may be noted the alliances recently concluded between various large federations in Italy and between miners and railwaymen in the United States. Commercial employees in Denmark, Norway, and Sweden have promised each other support in cases of labour disputes in any of the three countries, and will collaborate for uniformity of labour legislation throughout Scandinavia; an alliance covering the same countries has been formed to protect the interests of Scandinavian foremen.

Projects are in existence for the organisation of credit institutions by the International Federation of Trade Unions and by the Austrian trade unions; the German People's Bank founded by the German Christian Trade Unions is already in operation. The Swedish trade unions had a bank at Stockholm which before and during the war was in a flourishing condition, and which now, after passing through a crisis, seems to be again progressing.

Christian trade unions in France and Germany have been setting forth their principles in definite form. The Canadian Trades and Labour Congress has put forward a considerable programme of legislation, and has pressed for the application of the Conventions arising out of the International Labour Conferences. The New York State Federation of Labour, too, has demanded legislation of a somewhat similar character, although here, of course, there is no question of the application of the Conventions.

Finally, attention may be directed to the programme of the Australian Miners, who demand a shorter day and a shorter week, to the activities of non-manual workers' unions in Great Britain and France, and of unions of public service employees in Belgium and Norway.

### INTERNATIONAL ORGANISATIONS

The **International Federation of Trade Unions** of Amsterdam published in the January issue of its official organ, the *International Trade Union Movement*, detailed statistics of the membership of each international organisation which was affiliated on 1 January 1922. These statistics are here quoted in full, and have been completed by means of additional information from the March issue.

<i>Trade</i>	<i>Membership</i>	<i>Trade</i>	<i>Membership</i>
Agricultural workers	2,097,033	General workers	2,409,300
Bookbinders	261,203	Glass workers	147,500
Building workers	304,194	Hairdressers	18,500
Carpenters	92,462	Hatters	46,859
Commercial employees	343,000	Hotel, restaurant, and café employees	245,950
Diamond workers	24,500	Lithographers	40,698
Food workers	306,300	Metal workers	3,500,000
Fur workers	14,588		

<i>Trade</i>	<i>Membership</i>	<i>Trade</i>	<i>Membership</i>
Miners	2,614,215	Stone workers	162,050
Musicians	52,550	Tailors	590,500
Painters	83,333	Textile workers	1,604,000
Postal and telegraph workers	522,250	Tobacco workers	152,300
Potters	12,126	Transport workers	2,713,403
Printers	185,000	Wood workers	800,000
Public service workers	473,142		
Shoemakers	343,507	Total	21,160,643

The Executive Committee of the International Federation of Trade Unions conferred with a representative of the Norwegian Federation of Trade Unions on 17 February at Brussels as to the possibility of uniting all organised workers throughout the world in order to resist a growing wave of reaction. The Committee of the International Federation declared that it had always tried to secure the unity of the proletariat, and that it would be glad to find the workers belonging to Russian trade unions ready to unite with workers in other countries. The Committee declared itself willing at any time to meet a representative delegation of Russian workers.

Representatives of the International Federation of Trade Unions from seven European countries met in Brussels recently to discuss the possibility of founding an international banking organisation to promote trade union interests. A committee of experts was appointed to investigate the question and report to the Congress of the International Federation which was held at Rome on 20 April.

The Executive Committee of the **International Federation of Hatters** met recently at Monza in Italy. The secretary reported on the steps taken with a view to the prevention of mercury poisoning. A series of questions was submitted to be addressed to all hatters' unions. The International Labour Office has been approached on the subject, and the Committee hopes that the question will be placed on the agenda of the International Labour Conference in 1923. The Committee was informed of the negotiations in progress with a view to the affiliation of hatters' unions in Portugal, Brazil, and Jugoslavia, and of the steps taken in regard to the hatters' unions of Belgium, United States, the Argentine Republic, and Australia.

#### NATIONAL ORGANISATIONS

##### France

The National Committee of the French Confederation of Christian Workers (*Confédération française des travailleurs chrétiens*) has recently issued to its members a pamphlet on the wage question. Regarding the workers' contribution towards reducing the cost of living, "the National Committee thinks it right to remind Christian workers that, in exchange for fair remuneration of their labour, they should conscientiously contribute to the development of production; and that it is their duty to themselves and their country to increase their professional value in order to increase at the same time their professional output". Regarding the employers' contribution the Committee consider that "except in cases of *force majeure* an employer is responsible for the prosperity of the undertaking under his control and for the proper payment of co-workers whom he employs and who have concluded a labour agreement with him either tacitly or in writing. He is also bound to foresee and make provision against,

not only the risks he may run personally, but also those of his undertaking, including the ordinary risk of lack of work. He must not be satisfied to meet this contingency by dismissals which result in depriving the workers in his employment of their means of existence". The National Committee draws attention to the services which may be rendered in the matter of wage reductions by joint committees of employers' and workers' delegates to discuss and regulate common interests; and therefore affiliated organisations are urged to press for the formation of such committees. In order that strikes should be avoided or curtailed as far as possible, recourse should be had to arbitration as soon as a dispute appears to enter a dangerous phase; and, in view of the serious responsibility involved in breaking off negotiations or in denouncing agreements, no strike order should be given without the consent of the Confederal executive.

The Committee of the General Confederation of United Labour (*Confédération générale du travail unitaire*) met at Paris on 5 and 6 March, and drew up a programme including among other matters opposition to the direct taxation of wages and to wage reductions, and defence of the 8-hour day. It also decided to organise a demonstration on 1 May against the taxation of wages, trade union persecution, and militarism. The congress of the Confederation is to be held at St. Etienne on 25 June next.

The Third General Meeting of the Confederation of Intellectual Workers (*Confédération des travailleurs intellectuels*) was held on 23 February. Delegates attended representing the 82 associations affiliated to the Confederation, which has a total membership of 120,000. Reference was made to the success of the efforts of the Confederation for the benefit of intellectual workers. It is expected that much will be achieved in co-operation with the recently formed parliamentary groups for the protection of intellectual workers. There are groups for this purpose both in the Chamber of Deputies and in the Senate, who are in close touch with the Confederation. They will examine Bills from the point of view of the professional interests of artists, literary men, engineers, and all members of the liberal professions. In particular, reforms are to be suggested in legislation concerning patents and inventors' rights.

### Germany

It is announced that the Eleventh Congress of the General Federation of Trade Unions (*Allgemeiner Deutscher Gewerkschaftsbund*) will take place from 19 to 24 June next. Some important items on the agenda will be discussions on the relation of trade unions to works councils, forms and methods of trade union organisation, working agreements and industrial councils, and the future labour code in Germany.

The National Committee of the German Federation of Christian Trade Unions (*Gesamtverband der christlichen Gewerkschaften Deutschlands*) has addressed a manifesto to its members pointing out that the growth of the Christian trade unions—which now have two million members, manual and non-manual—and the situation arising out of the war and the Revolution have immensely increased the importance of the rôle which the Christian unions have to play in national life. The Committee urges members not to hesitate at any

sacrifice which may be required in a great effort to make known the ideals of the movement and still further to increase its membership. All the resources of the movement must be utilised. The propaganda and educational work must centre in *Der Deutsche*, the organ of the Christian unions, economic efforts must be concentrated in the German People's Bank, and the credit institution founded by the Christian workers and the producers' and consumers' co-operative associations must be developed.

### Poland

A meeting of the Central Trade Union Federation (*Komisja Centralna Związkow Zawodowych w Polsce*) was held on 23 January at Warsaw. The agenda included the questions of unemployment, works councils, collective agreements, compulsory arbitration, and the position of trade unions in Upper Silesia. The Federation urged that, as unemployment was increasing and the authorities had not taken the necessary measures to alleviate the crisis, all trade unions should begin a campaign with a view to compelling the Government to take more energetic action. The Federation demanded the institution of works councils in all state and private undertakings, such councils to act in close collaboration with the trade unions. The meeting considered that trade unions only should have the right to conclude collective agreements, but that it should be possible to extend agreements of this kind to include all undertakings in a particular district, subject only to the decision of the majority of the workers concerned. It was decided to oppose every attempt to make arbitration compulsory, but to insist that the decisions of voluntary arbitration institutions should be observed by all concerned. It was decided to convene a national congress for 25 May 1922.

### Great Britain

The National Federation of Professional, Technical, Administrative, and Supervisory Workers held its second annual conference in London on 4 February. Fourteen affiliated associations and federations of associations were represented, of numerical strength varying from under 2,000 to approximately 70,000 and with an aggregate membership of upwards of half a million. During the past year there have been three important additions to the Federation, namely, the Civil Service Confederation, the Architects' and Surveyors' Assistants' Professional Union, and the Electrical Power Engineers' Association. It was stated that the present industrial depression had involved heavy sacrifices for non-manual workers, who had lost in weekly wages about £1,000,000.

The annual report drew attention to special dangers to which protective associations of professional workers are subjected. It is stated that an attempt is commonly made by employers to alienate members of the staff from their trade organisations by the introduction of subsidised pension schemes for employees under the condition that members participating in such schemes shall not belong to a trade union. The report recommended as the most effective method of resistance to cuts in wages and salaries the adoption of a grouping system, so that associations which have to face common employers, whether public or private, would be able to do so effectively. For this purpose a list of sixteen groups was suggested, which would cover all the occupations of the members. Resolutions were passed deprecating any attempt to reduce educational opportunities and

recommending that the Education Act of 1918 should be put into operation without delay. Another resolution urged affiliated organisations of the Federation to press the Government to acknowledge the right of all members of all non-manual workers' organisations to claim as a deduction from their income tax assessments all reasonable out-of-pocket expenses incurred in the exercise of their respective businesses. Considerable discussion took place on the subject of Whitley councils. A resolution was proposed in the name of the Civil Service Confederation that the Conference "recognising the good work accomplished as a result of the application of the Whitley Report to the Civil Service, recommends the adoption of its principles as far as practicable in the industries represented at this Conference". Criticisms were made to the effect that whilst the Whitley scheme might be of value in nationally owned services, its principles and machinery were detrimental to the interests of workers in privately owned commercial and industrial establishments, that under the scheme the essential sharp distinction between employers and employed was lost, and that the system was seriously weakened by the fact that agreements made under it could not be enforced by law. The motion was eventually withdrawn and the whole matter referred to a committee for consideration and report.

Several important amalgamations have lately taken place among British trade unions. The Amalgamated Managers' and Foremen's Association and the Scottish Foremen's Protective Association have united to form the Amalgamated Managers' and Foremen's Association, with headquarters at Newcastle. The Association's principal object is "to facilitate harmonious co-operation and industrial peace between supervisors, employers, and workmen, so that strikes and lock-outs may be eliminated". The Transport and General Workers' Union has received the accession of the Hull and Grimsby members of the National Union of British Fishermen. The great majority of workers in the woollen industry are brought into one organisation by the amalgamation of the National Society of Dyers and Finishers and the Yeadon and Guiseley Factory Workers' Union with the General Union of Textile Workers, which came into formal operation in January 1922.

### Canada

On 24 February a deputation of the Trades and Labour Congress waited on the members of the Canadian Government and presented a programme of demands. The deputation asked that effect should be given to the Conventions adopted at the three meetings of the International Labour Conference. The previous Government had referred the application of the Conventions to the Provincial Governments on the ground that they were not within Federal jurisdiction. The deputation, however, urged that the Federal Government should take steps to have the Conventions accepted as treaty obligations, and thus bring them within its jurisdiction. If this should not be possible, then a conference should be called "in order to bring about immediate and unified action by the various Provincial legislatures and thus fulfil the moral obligations resting upon the Canadian Government under the terms of the Versailles Treaty of Peace, to which Canada is a signatory nation".

Various amendments were asked for in existing legislation affecting elections: proportional representation, a public holiday on election day, restoration of the right of railway workers to offer themselves for political office without forfeiture of positions or loss of seniority, and

repeal of the clause in the Franchise Act of 1920 which prohibits trade unions and similar organisations from contributing to funds for election campaigns. The deputation suggested that immigration of all but certain exempted classes from Europe should be prohibited for at least two years, and that Asiatics should be altogether excluded. Action should be taken to prevent the recruitment of labour outside Canada. It was further urged that a system of unemployment insurance should be instituted applicable to workers both in public and private employ. Other items on the programme include the legalisation of peaceful picketing, consolidation of national railways and workers' representation on the board of management, Whitley councils in the Civil Service, old age pensions, an independent tariff commission on which labour interests would be represented, legislation to define the fair wage resolutions of 1900 and 1907, development of industrial research, registration of union labels, and revision of the Industrial Disputes Act. The programme concludes by making recommendations in favour of public ownership of public utilities, protection of the public against over-capitalisation in industry, development of the co-operative movement, and restriction of naval and military expenditure.

The provincial executives of the Trades and Labour Congress have also submitted to the Legislatures of Ontario and Quebec lengthy programmes of legislation, based on that submitted to the Canadian Government. Chief among the items to be found in both programmes are demands for legislation embodying the Conventions concerning the 8-hour day, employment of women before and after childbirth, employment of women and children generally, and the weekly rest day; and further, hygienic regulations affecting barbers and painters.

### **Australia**

The Council of the Miners' Federation has issued a manifesto to the effect that an effort must be made at an early date to realise the miners' demands as they were formulated two years ago. The demands are a 6-hour day; a 5-day week; abolition of the contract system; minimum weekly wage; a fortnight's holiday on full pay each year; full wages as compensation for time lost owing to occupational diseases or accidents; free provision by employers of tools, light, and explosives; adequate facilities for washing and changing clothes at all mines; instalment of safety appliances; abolition of afternoon shift; and, finally, a voice in the executive control of the industry. The miners are asked to realise that "when we have strength sufficient to dictate to the coal owners how they shall utilise their capital, we will be strong enough to take over the whole industry".

### **Belgium**

A Congress of the Federation of Workers in Public Services (*Fédération des travailleurs des services publics*) was held at Brussels from 28 to 30 January 1922. The agenda included the questions of workers' control and the 8-hour day. The congress passed a resolution indicating the line of action which should be adopted by the delegates of the Federation on the Economic Council of the Trade Union Committee which is studying the question of workers' control. The resolution recommends that the Bill which is to be introduced should deal chiefly with the functions and composition of the works councils. The councils should have the right to information as to the capital invested in the

undertaking and the method by which it is procured, the cost of raw materials, cost of production, selling prices, methods of administration and production, wages and salaries, profits, technical processes and improvements in tools and machinery, supervision and application of legislation concerning the protection of workers and works regulations, and engagement and dismissal of workers. The congress also passed a resolution declaring its determination to employ all the means in its power to enforce the observance of the 8-hour day. Finally, it was decided to begin negotiations with the National Union of Non-Manual Workers with a view to amalgamation.

### **Austria**

At a recent meeting of the Credit Association of Austrian Labour Organisations it was decided to establish a Labour Bank. A committee of the Association has been entrusted with making the necessary arrangements, and has submitted a draft constitution to the competent government Departments for their approval. The headquarters of the bank are to be in Vienna, and it will have branch offices in the chief provincial towns. Its capital is to be subscribed and held solely by trade unions and co-operative organisations. The depositors will exercise a certain control in the management of the branch offices; labour organisations, by depositing their funds with this bank, will be independent of other credit institutions. The project is supported by the Union of Co-operative Societies and by the works councils in the metal trades.

### **Spain**

An association under the name of the General Association of Technical Workers in Industry (*Asociacion general de tecnicos de la industria*) has lately been founded, whose object will be to assist the progress of Spanish industry, raise the standard of education of technical workers and defend their professional interests. Membership is open to all technical workers, national or foreign, who exercise their profession in Spain and contribute directly or indirectly to the development of technical science.

### **Norway**

On 23 February the Norwegian Wage Committee of State Employees had called a meeting of the executives of a series of organisations of state employees in order to continue the discussion of the formation of a national joint organisation. The meeting was attended by about thirty representatives of 7,000 members of organisations of the postal, telegraphic, and telephone service and the administration of prisons, etc. The chairman of the Wages Committee gave a report on the work done with the object of forming a national union, and he pointed out the need for going on, now that it appears that the idea is gaining more and more ground. In the discussion which followed it was made clear that the feeling in favour of a national union is very strong. A resolution was unanimously adopted to form the Norwegian Federation of State Employees (*Norges statstjenestemens landsorganisation*) and the Wages Committee was asked to call a constituent meeting as soon as the work of the Statute Committee should have been completed.

### **Denmark, Norway, and Sweden**

A conference of representatives of 45,000 commercial employees of Denmark, Norway, and Sweden, was held recently in Christiania. A resolution was adopted pledging the unions to support each other in

cases of labour disputes in any of the three countries. The present state of legislation affecting hours of work and apprenticeship was also discussed, and it was decided to work for uniformity of legislation as far as possible throughout Scandinavia.

Reference has already been made <sup>(1)</sup> to the question of forming an alliance of Scandinavian foremen. It is now reported in the press that a meeting for considering this question was held in February at Christiania. Each of the countries concerned was represented by two delegates. An agreement was arrived at as to the formation of an organisation called the Scandinavian Foremen's Alliance (*Skandinaviska arbetsledarunionen*), the object of which is to look after the social and economic interests of Scandinavian foremen.

### Italy

On the initiative of the Railwaymen's Union (*Sindacato Ferrovieri*) meetings of representatives of various workers' organisations have been held at Rome, with a view to establishing a joint basis for action. Delegates attended from the General Confederation of Labour, the Italian Trade Union Federation (independent), the Italian Federation of Labour (Republican Reformist), and the National Federation of Harbour Workers. Following upon a discussion of the political and trade union situation, a resolution was carried of which the following are the essential points :

The representatives of the workers' organisations, considering it essential at the present time that the forces of labour should unite, resolve to oppose to the united forces of reaction an alliance of the forces of the proletariat, and to establish a national committee consisting of the representatives of all allied organisations.

This committee will draw up a practical programme embodying all means of trade union action, including the general strike, with a view to developing the strength of the proletariat.

This committee will consist of five representatives of the General Confederation of Labour and two representatives of each of the other organisations. Resolutions adopted unanimously by the committee will be binding on all the allied organisations.

### United States

On 21 February representatives of fifteen railway unions and the United Mine Workers, with a united membership of over two millions, met at Chicago and agreed to form an alliance for the purpose of effecting a co-ordination of their strength for closer co-operation ; the alliance is not to be effective until ratified by the constitutional authorities of each associated organisation. The mutual obligations to be incurred by the members are limited, and do not include any specific form of practical aid ; it is merely stipulated that when any of the associated organisations "is made the victim of unwarranted attacks, or its integrity is jeopardised, it will become the duty of the representatives of each of the associated organisations to assemble to consider the situation". Any action decided upon by the assembly is subject to the approval of each organisation represented. The conduct of the business of the alliance is entrusted to an executive committee of representatives of the chief associated organisations.

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<sup>(1)</sup> *International Labour Review*, Vol. V, No. 3, Mar. 1922, p. 461.



Mr. Samuel Gompers, President of the American Federation of Labour, in an address before the National Civic Federation, declared himself to be opposed to unemployment insurance in any form. Any such system, he is reported to have said, means recognition of unemployment as a permanent condition, and he expressed the belief that unemployment is controllable and there is a remedy for it. Mr. Gompers branded the unemployment conditions existing at present as "hand made", "premeditated" and "avoidable". He cited England as an example where such insurance had failed.

The Executive of the New York State Federation of Labour representing over a million trade unionists in the State of New York has made public the legislative programme of the organisation. Each union is called upon to appoint a committee to familiarise itself with pending labour legislation and to get in touch with Senators and Assembly men. Among the large number of measures which the Legislative Committee of the Federation will try to introduce may be mentioned Bills providing for the extension of the 8-hour day Act to include state employees; minimum wages; 8-hour day and 48-hour week for women and minors; painters' health; rest day; and various amendments to the Workmen's Compensation Law.

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## Employers' Organisations

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THE necessity of reducing costs, and the consequent reconsideration of the question of working hours from this aspect, continue to rank foremost among the questions exercising employers' organisations. The subject of managerial rights and duties, which has been raised in the engineering dispute in Great Britain, is also given attention in the report of the New Jersey State Chamber of Commerce summarised here. The attempts being made in New York State to obtain legislative provision for the handling of industrial disputes are of considerable importance as indications of the attitude taken up towards such measures in the United States.

### Belgium.

The General Meeting of the Belgian Federation of Manufacturers (*Comité central industriel*), held on 22 February, passed the following resolution concerning wage reductions and the 8-hour day :

The delegates of all manufacturers' groups, noting the increasing fall in exports of manufactured products shown once more by official statistics for the fourth quarter of 1921 (705,000,000 francs as compared with 1,269,000,000 for the corresponding period of 1920) and the obvious necessity of reducing every factor in the cost of production in order to meet foreign competition, to guarantee the sale of their products, to keep factories working, to provide work for the thousands of workers in their employment and to obtain for the country the sums required to pay for foodstuffs obtained from abroad, are unanimously of opinion that the only means of escaping from the disastrous consequences of the present situation are :

(1) To reduce prices of all commodities and the cost of living by sacrifices in which all must take their share, employers, workers and middlemen

alike, by continuing and extending the wage reductions and the reductions in selling prices which have already been accepted, so as to make these correspond to wages and prices in competing countries and on international markets.

(2) To consider without delay, in the light of experience and in the same spirit, the question of adapting the Hours of Employment Act to meet the requirements of export trade, and to apply this Act in future with the prudence and flexibility demanded by the competent bodies which have been consulted in conformity with the provisions of the Act.

(3) To put an end at once to the abuses and the waste of money due to the Emergency and Unemployment Funds which are a source of demoralisation and constitute an intolerable burden for the taxpayers, and also have an effect on the cost of production and the cost of living.

(4) Without prejudice to the general 150 per cent. increase of rates on the State railways introduced in 1919, to restore the special rates which were established long before the war as a result of careful consideration on the part of the Government and discussion by Parliament.

### France.

A meeting of presidents of French Chambers of Commerce was held at Paris on 7 March 1922. It was attended by representatives of 125 Chambers of Commerce. The principal items on the agenda were trades councils (*conseils de métiers*), apprenticeship, and family allowances (*sursalaire familial*).

The meeting discussed at length the various schemes submitted concerning apprenticeship and, after an exchange of views, in the course of which it advocated strongly the principle of the "organisation of apprenticeship by the Chambers of Commerce", it instructed its secretariat to complete the examination of the question with a view to arriving at a common decision of presidents of Chambers of Commerce.

In regard to family allowances (Mr. Bokanowski's Bill) <sup>(1)</sup> the following resolution was carried :

Whereas family allowances have been voluntarily introduced by employers for the benefit of those of their workpeople who have family responsibilities, and whereas this system has developed considerably within the limits of private initiative in consequence of the establishment of compensation funds to equalise the burdens imposed by the introduction of the family allowance system ;

Whereas legislative action would inevitably result in the adoption of uniform regulations for the whole of France, though experience proves the necessity of taking local customs into consideration, since flexibility and adaptability to varying requirements are essential to the development of a system which is of too recent date to be subjected to uniform regulation ;

Whereas it would be a fundamental error either to treat family allowances as a supplementary wage, since wages are remuneration for work done, or to attempt to make family allowances proportionate to the wage received by the worker, since they can only be equitably based on the size of the family ;

The meeting of presidents of Chambers of Commerce recommends :

(1) That Parliament reject this Bill or any other similar Bill which aims at making family allowances compulsory by law for all or for certain employers ;

(2) That in any case the discussion should be postponed in order to enable the system to spread without compulsion, and in order that the general method of application should be determined in the light of longer experience ;

(3) That all available means of propaganda should be utilised in order to enlighten employers who have not yet become members of compensation

<sup>(1)</sup> See *International Labour Review*, Vol. V, No. 2, Feb. 1922; p. 272.

funds as to their objects and method of operation, and to induce such employers to take their share in this social duty by becoming members of these funds.

### Germany.

The Federation of German Employers' Associations (*Vereinigung der Deutschen Arbeitgeberverbände*) held its annual congress at Cologne on 7, 8 and 9 March. Dr. Sorge was in the chair. The secretary, Mr. Tänzler, in his report, stated that the membership of the Federation is at present nearly 2,000 employers' organisations, including 215 industrial federations, 108 district unions and 107 mixed craft unions. He referred to the excellent relations of the Federation with the Federation of German Industries (*Reichsverband der Deutschen Industrie*) and with the German agricultural and commercial employers' organisations. He also mentioned the part taken by the German employers in the Third International Labour Conference and announced that the Federation had become affiliated to the International Organisation of Industrial Employers, the headquarters of which is at Brussels.

### Great Britain.

According to the *Engineering and National Employers' Federations*, the lock-out in the engineering industry in Great Britain, which commenced on 13 March, was brought about by far more fundamental differences than those to which it was generally attributed. The following notice, which was posted at the works of all federated engineering firms, explains the point of view of the Employers' Federation :

#### MAINTENANCE OF RIGHT OF EMPLOYERS TO EXERCISE MANAGERIAL FUNCTIONS

In connection with the grave situation now created in the engineering industry, the employers desire to make clear certain points which have been misrepresented for the purpose of placing discredit on the Engineering and National Employers' Federations :

(1) There is no justification for the statement that the employers' policy is directed towards "smashing" the trade unions ; on the contrary, they have frequently taken steps to assist the unions in maintaining their authority, and they will continue to do so.

(2) The question at issue is not one of overtime. The solution of the overtime question cannot be achieved until the main issue has been settled.

(3) The issue is a refusal by the trade unions to continue the recognition of the employer's right to exercise managerial functions unless with the prior consent and approval of the unions.

(4) It is essential in the interests of the country, the workpeople, and the employers, that freedom of management should be maintained in the works, restrained only by agreements entered into mutually with the trade unions. It is only by this means that the pre-eminent position of British engineering industry is to be restored in the markets of the world.

(5) The principles of management are expressed in the Memorandum of Agreement of 17 and 18 November 1921, between the Federations and the Executive Council and National and District Representatives of the Amalgamated Engineering Union. That agreement was recommended by the representatives of the union for acceptance by their members, but they on a small ballot rejected it. The paragraphs are as follows :

(a) The Trade Union shall not interfere with the right of the employers to exercise managerial functions in their establishments, and the Federations shall not interfere with the proper functions of the Trade Union.

(b) In the exercise of these functions, the parties shall have regard to the Provisions for Avoiding Disputes of 17 April 1914, which are amplified by the Shop Stewards and Works Committee Agreement of 20 May 1919, and to the terms of other national and local agreements between the parties.

(c) Instructions of the management shall be observed pending any question in connection therewith being discussed in accordance with the provisions referred to.

(6) The employers maintain that the agreed constitutional procedure at present available in cases where the unions consider they or any of their members have cause for complaint amply safeguards the interests of the unions.

(7) In any organisation for the direction of human effort it is necessary that there shall be one directional authority, and all experience has shown that dual control such as is now sought is incompatible with the proper working and efficiency of an industrial establishment.

### Japan.

As a result of negotiations between the coalmine owners of Japan, the Chikkuho and Hokkaido Coalmine Owners' Associations decided to decrease their output by 17 per cent. as from 1 May 1921. The mine owners of the Joban district decided at the same time to decrease the output of their mines by 12½ per cent. In Hokkaido the Hokkaido Coal Mining and Shipping Company, which owns most of the important mines in that district, shortened the working day and thus reduced wages. The Mitsubishi Mining Company and other mine owners changed from two shifts to one shift per day and, while avoiding discharging workers, omitted to replace such workers as left voluntarily. In the Joban district the mine owners curtailed working hours and diminished wages. In the Kyushu district, which includes the Chikkuho field, where more than 80 per cent. of the miners in Japan are employed, the Mitsui Mining Company, the Kaishina Mining Company and the Yamano Mining Company discharged large numbers of their employees, but paid the travelling expenses to their native town or village so as to enable them to take up agricultural work, or to other mines where they might seek employment.

The National Federation of Coalmine Owners (*Zenkoku Tanko-Shu Kai*), at its Councillors' meeting on 14 January 1922 at Tokio, decided to continue this restriction of output. It had been proposed by the Chikkuho Coalmine Owners' Association that the restriction should be maintained until the end of December 1922, and a Directors' meeting of the Federation held on 25 December 1921 voted in favour of this proposal. Nevertheless the Councillors' meeting agreed that in view of the present seasonal demand for coal the coalmine owners in the Chikkuho and Hokkaido districts might decrease the amount of restriction to 12½ per cent. during the period January to the end of April 1922.

The Federation of Japanese Business Associations (*Dainihon Jitsugyo Kumiai Rengo Kai*) held a meeting on 9 January in the city of Osaka under the chairmanship of Mr. S. Muto, to discuss the manner of disposal of the money which would be saved as a consequence of the restriction of naval armaments. As a result of this meeting a memorandum was laid before the Prime Minister on 16 January suggesting that the state should use this money : (1) for the relief of workers who would be thrown out of employment ; (2) for the improvement of education ; (3) for better treatment of soldiers ; (4) to a certain extent to decrease taxation of business.

With regard to the improvement of education, the memorandum recommended the advisability of adding to the number of supplementary vocational schools and proposed that the proportion of the State's contribution towards the expenditure incurred in respect of national compulsory education should be increased. It further suggested that allowances to meet the liabilities of sickness, old age, and death should be made to school teachers.

In connection with proposals for the better treatment of soldiers, it was suggested that the pensions or allowances to survivors of those killed on active service, or to disabled or retired soldiers, should be increased.

### **Netherlands.**

The Minister of Labour of the Netherlands has received two memoranda concerning the Hours of Employment Act of 1919.

The first of these memoranda comes from six national employers' federations : The General Federation of Catholic Employers ; the Catholic Federation of Employers' Unions ; the Federation of Manufacturers' Associations ; the Federation of Employers' Associations for the Study of Labour Questions (*Centraal Overleg*) ; the Association of Christian Employers and Wholesale Dealers ; the Netherlands Employers' Association.

The memorandum compares the German Hours of Employment Act with the Netherlands Act and declares that the German Act makes much greater concessions to industry than the Netherlands Act. The latter adopts the principle of the 45-hour week, the former that of the 48-hour week. In Germany industries in which work is continuous may apply a 56-hour week, which makes the 3-shift system possible. The Netherlands Act necessitates the 4-shift system in the same industries. The prohibition of night work, apart from a few exceptions specified in the Act, makes it very difficult to apply the 3-shift system in the Netherlands.

The provisions relating to the prohibition of night work for women and young persons are more elastic in the German Act than in the Netherlands Act. This is also true of the Saturday afternoon holiday, which does not come within the scope of the German Act.

The memorandum draws the attention of the Minister in particular to the elasticity of the provisions of the German Act in regard to overtime and declares that, generally speaking, the German Act interferes less with industry than does the Netherlands Act.

In conclusion, on behalf of almost the whole of the industry of the Netherlands the six organisations ask the Minister to support the amendment of the Act and to prepare regulations concerning hours of employment which would be less prejudicial to industry than the present regulations.

The Federation of Manufacturers' Associations of the Netherlands has addressed to the Minister a separate memorandum in which it declares that the essential conditions for the restoration of industry are increased output and decrease in the cost of production. Accordingly, in case of emergency, manufacturers ought to have the power to increase hours of work to 10 per day and 56 per week without approaching the authorities for permission ; trade union action would provide a sufficient guarantee against abuse.

The memorandum adds that the fact that the Washington Convention of 1919 concerning hours of employment has been ratified by only four States of secondary industrial importance (Roumania, Greece, Czechoslovakia and India<sup>(2)</sup>) shows that too much has been attempted in the international sphere ; this is the reason why the great industrial countries show increasing reluctance in regard to the ratification of this Convention. This is not astonishing, continues the memorandum, for

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(2) To these Bulgaria should be added.

the optimism prevalent at Washington in 1919 did not pay sufficient attention to the practical needs of industry.

The memorandum considers that a similar mistake has been made in the national sphere and criticises the Labour Act of 1919 and the arguments adduced in its support. It declares that the increase in output which could reasonably have been expected as a consequence of the enactment of this Act has not been realised; on the contrary, general charges have increased and the Act has imposed upon industry in the Netherlands new burdens amounting to several millions. The cost of living has increased considerably; the decrease in hours of work has increased the cost of production and contributed to a very great extent to bringing about an unemployment crisis.

The Federation declares that more work must be done at a lower rate and declares that this is an economic necessity before which everyone must give way. The cost of production can only be reduced by extending hours of employment or bringing down wages. "We prefer the former method, if it proves adequate, because extension of hours of employment, weekly wages remaining the same as at present, seems to us the best way of bringing about the necessary decrease in the cost of production and the one which will be least felt by the workers".

The Federation declares that the Hours of Employment Act has caused an artificial increase in the cost of living and has raised hopes which were doomed to disappointment.

In conclusion, the memorandum states that an immediate and fundamental revision of the Labour Act of 1919, which has seriously affected the economic strength of the Netherlands during a critical period, is inevitable if the moral and material losses already suffered are not to be rendered irreparable.

### **Poland.**

The *Kurjer Polski* for 22 January 1922 publishes a report of the General Meeting of the Association of Employers in the Polish Metal Industry (*Polski Związek Przemysłowców Metalowych*), which includes 282 proprietors of metal works.

The meeting passed a resolution against the Bill concerning holidays with pay, on the ground that the proposal is quite unjustifiable, and would have very serious economic consequences for the country.

### **United States.**

The full report of the Committee on Industrial Relations of the *New Jersey State Chamber of Commerce*, referred to in last month's article, has now been received. In view of the carefulness with which it has been drawn up and the impartiality of its findings, it is of interest to make rather fuller mention of its more prominent features than was previously possible.

The report analyses the fundamental issues which arise between employers and workers and finds that they may be classified roughly into three classes. In the first place, there is the issue concerning wages (including hours of work and security of employment) and profits. Secondly, there is the issue between the democratic aspirations of the workmen, who desire to exercise some power over the conditions under which they work, and what the employers consider as their domain of power. Thirdly, there is the issue over certain abuses of which both sides are guilty, such as, on one side, ill-treatment by

foremen, unjustified discharges, discrimination against union men ; and, on the other, "ca'-canny", violation of shop discipline, and discrimination against non-union men.

The New Jersey State Chamber of Commerce is of the opinion that the outcome of these various issues largely depends on the kind of leadership exercised by employers. It distinguishes two general methods of constructive co-operation—within the shop, and between organisations of employers and organisations of workmen within the industry. Employers who follow the road of constructive achievement within their own shops meet the three issues enumerated above by giving their workmen a greater share of comfort and security, and seeking to satisfy their natural desire for progressive improvement ; by giving them the right of collective action through a system of shop representation ; and, finally, by means of expert personnel administration and shop representation, gradually eliminating those abuses on both sides which stand in the way of good relationship. Other employers, who follow the road of constructive co-operation with labour organisations through their associations, also endeavour to follow the three lines indicated—that of economic improvement for the workmen (consistent with the capacity of the industry and justice to all concerned) ; that of the broadening of opportunities for the democratic self-expression of the workmen ; and that of elimination of abuses. It is stated that two particularly notable instances of such co-operation are to be found in the Chicago, Rochester, and Baltimore markets of the clothing industry and the electrical industry of the United States. In the former a comprehensive system of tribunals has been set up for the disposal of all complaints, individual as well as collective, presented by either side in the daily routine ; and some of the ablest men in industrial relations are developing model working conditions in the industry. In the latter case a nation-wide tribunal and conference system has been created which has already achieved creditable results. The response of labour organisations in both instances has been gratifying.

The report concludes with a number of specific recommendations concerning industrial relations, which include the use of personnel experts to the end that the management of industrial relations in industry should be carried on in a no less thorough and scientific manner than the management of the physical problems of production ; the encouragement of the establishment of shop representation, with the particular recommendation that in constituting committees dealing with workmen's compensation, unemployment, and other questions which vitally affect labour as well as the employers and the public, an endeavour should be made to consult representatives of organised labour as well as those other interests affected ; and an endorsement of the invaluable aid of impartial research on industrial questions in the following terms :

The practice which the State Chamber has been following of having its committees base their decisions on the investigations made by its Bureau of State Research ; of maintaining the research work of the latter absolutely independent and free of all dictation from the officers or members of the Chamber as to the character of facts or conclusions to be presented ; of publishing the reports of the Bureau free of all censorship ; and of merely seeing that the men carrying on the research be thorough and unbiased students, fearless in their work—this practice is sound and should be continued and further developed. We cannot emphasise too strongly our belief that only by raising research to a high level and maintaining it at the highest standard of integrity and responsibility, and only by developing in ourselves a willingness to look facts, whether pleasant or unpleasant,

straight in the face, can we, whether employers or workmen, hope to develop a better relationship among ourselves and help progressively to improve the world in which we live.

The United States periodical *Industry* of 15 February 1922 gives an interesting account of "How Business Co-operates with Government in Washington". It is stated that fifty or more trade associations have headquarters in Washington to maintain direct relations with the Government. These organisations include the American Bankers' Association, American Railway Association, the Chamber of Commerce of the United States, the National Association of Manufacturers, the National Association of Credit Men, the National Industrial Conference Board, the National Industrial Council, the National League of Commission Merchants of the United States, the National Grange (farmers' organisation), as well as organisations of business men engaged in a single industry such as the Institute of American Meat Packers, the National Lumber Manufacturers' Association, and similar trade organisations.

It is stated that "the day when members of Congress were lined up by special inducements in favour of some business measure has gone by—if it actually dawned". The chief activity of these liaison officers is the supplying of information not only to their own membership but to the Government also. One example which is said to be typical of the thoroughness with which a trade body prepares itself for any such request from the Government for detailed information is quoted.

Minerals enter into tariff schedules to an extent unthought of by the average citizen. Adequate information being unavailable, the American Mining Congress many months ago set a man to work to make himself the highest authority in the world on the subject. His investigations and tabulations on every dutiable mineral, its sources, quantities produced, wages paid for mining, etc., were a revelation to the Ways and Means Committee, which promptly requisitioned his services as an expert. The data were supplied simply as an exhibit of facts.

The Industrial Relations Bill drafted by the *New York Board of Trade and Transportation* <sup>(3)</sup> has been introduced into both Chambers of the New York State Legislature. The preamble of the measure states that it is framed "with the prime purpose to preserve the public peace, protect the public health, prevent industrial strife, disorder and waste, and to secure the regular and orderly conduct of the business affecting the living conditions of the people of this State, and to promote the general welfare". The scope of the Bill is made to include such disputes arising between employers and employees within the State as are affected with a public interest, such as the manufacture, transportation, transfer or distribution of food and food products, wearing apparel, etc. The Bill also applies to mining and well-boring operations for fuel, salt, and other material in common use by the people, and building material. The Bill provides for an Industrial Relations Term of the Supreme Court as final arbitrator of labour disputes. This Industrial Relations Term, in cases submitted by the Government, would have full power to fix wages, hours of labour, rules and practices and working conditions in the plant or industry affected. In reaching this decision it would be allowed to examine all necessary records, investigate the conditions of employees, the wages paid, the return accruing to the employer, and all questions affecting the conduct of the

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(3) See *International Labour Review*, Vol. V, No. 3, March 1922, p. 473.



business. Controversies would be adjusted on the principle of "economic-legal justice" to both sides. Ten or more citizens, not financially related to either party to a dispute, would be privileged to apply to the Supreme Court for a restraining order to prevent a threatened strike or lock-out. Penalties are provided by holding violators of the law punishable for contempt of court and misdemeanour. The right of an employee as an individual to strike is admitted by the Bill, which also recognises the principle of collective bargaining, while laying down that the men's representatives in such bargaining must be chosen by secret ballot.

It is reported that the clauses of this Bill defining its scope as regards the industries affected with a public interest have been modified in the New York State Senate so as to limit its application to public utilities only.

The *Chamber of Commerce of New York State* has also drafted a Bill aiming at prevention of strikes and lock-outs. This proposal gives the New York State Industrial Commission authority to investigate and settle labour disputes, and to supervise the taking of all strike and lock-out votes. Labour unions and voluntary associations and their officials and agents may sue or be sued, under the provisions of the Bill. The Industrial Commission would have full authority to "exercise such power in the interest of the peace and order of the State, and in such manner as it shall determine to be best calculated to promote the public welfare by preventing industrial discord and interruptions of industry, in consequence of labour disputes, lock-outs and strikes". Under the terms of the Bill, Labour Unions would be required to file monthly statements with the Commission, and throw open all their accounts and records for audit by the State. Strikes or lock-outs, in violation of the Act, except as prescribed by the Commission, are declared "conspiracy in restraint of trade", and made punishable as misdemeanour.

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# PRODUCTION AND PRICES <sup>(1)</sup>

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## Cost of Living and Retail Prices

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**I**F the various countries for which index numbers of the cost of living are given in table I are arranged according to the fluctuations in the cost of living in recent months, they fall into the following groups :

(a) Countries where the cost of living index numbers are definitely falling : all the non-European countries, the United Kingdom, and the ex-neutral European countries. In these, prices are falling for all the groups of commodities, except rents, which are still rising or are stationary.

(b) Countries where the cost of living index numbers have, on the whole, been falling in recent months but with irregular fluctuations : Belgium, France, Italy, and Finland. In Italy and Finland the rise, which was considerably higher than that in France or Belgium, does not yet seem to have been completely checked. With regard to the separate groups of commodities, almost only in foodstuffs has the fall in these four countries been at all general, and this group has in general been the determining factor in the recent decline in the cost of living index numbers. Most of the other groups are still rising or have been stationary in recent months.

(c) Countries where prices are still definitely rising : Czechoslovakia, Germany, and Bulgaria ; Austria and Poland, where the rise is enormous.

An attempt has been made in table IX below to bring out the relation between the fluctuations in the cost of living index numbers and those of the main groups of commodities over the last three years, during which period the general tendency was first upwards and then downwards. The table contains only countries which publish data for the four main groups, namely, foodstuffs, clothing, heating and lighting, rent. Germany, Austria, Italy, and Finland, where prices were still rising in December 1921, have been omitted.

In those countries where the fall has been in progress since 1921 the general course of prices is sufficiently clear. There was at first a quite general rise during 1919 and the beginning of 1920, with only some slight seasonal fluctuations. As a rule the rise was greatest for clothing, except in the Scandinavian countries, where it was still higher for heating and lighting. Clothing and foodstuffs fell first, and with them the general cost of living index number. In some countries clothing began to fall slightly before foodstuffs ; when this happened the general index number did not fall with it. The fall in heating and lighting came a few months later than that in the first two groups ; the rent index number was still rising at the end of 1921.

There is considerable divergence between the fluctuations in the general cost of living index number and the food index number, which latter, failing other data, is often taken as an approximate measure of

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(<sup>1</sup>) For the sake of convenience and of comparison between the two editions of the *Review*, the French alphabetical order of countries has been adopted in this and the following sections.

the cost of living. Up to about the end of 1920, in fact, the food index number remained above the cost of living index number, which was held back by the slow rate at which rents rose. In 1921, with rents still rising and all other commodities falling more slowly than food, the food index number fell below the cost of living index number and has since remained below it.

On the basis of these figures, therefore, it appears that when food prices are taken as a measure of the cost of living—as has to be done in several cases—the resulting estimate is likely to be too high towards the end of a period of rising prices and too low when prices have been falling for some months.

#### NOTE ON THE METHODS OF COMPILING THE COST OF LIVING INDEX NUMBERS IN THE TABLES

The following tables show for certain months from 1914 to 1922 the index numbers of the cost of living in different countries and the index numbers of the chief groups of commodities used in calculating the general index number (food, clothing, heating and lighting, and rent). No figures are given for the remaining items, which are generally classified under the term "miscellaneous", as the items included in different countries are too varied to permit of any comparison. In Canada, for instance, laundry starch is the only item included in addition to the chief groups, while the United States includes forty-four additional items. The number of countries given in the different tables varies according to the information available. Several countries only publish an index number for food, while others omit clothing, and sometimes even rent.

The index numbers in tables I to V have a post-war base period. Wherever possible, the common base July 1914=100 has been taken. In addition, tables VI and VII give index numbers calculated for a pre-war base period, which, wherever possible, is taken as December 1920=100.

A short account of the scope of the index number and the method of compilation used, together with a list of sources, is given in the last number of the *Review* (2). A reference to this will show considerable differences exist, not only in the number and kind of articles included and the sources from which prices are collected, but also in the methods employed, especially in the systems of weighting used. It is therefore necessary to insist on caution in using the figures for comparison between countries.

N. B. The note on Canada in the last number of the *Review* should, for use with these tables, read as follows:

#### **Canada: *Labour Gazette of Canada.***

A more complete index number of the cost of living has recently been calculated, which, in addition to foodstuffs (29), heating and lighting (5), and rent, contains also clothing (including footwear) and miscellaneous (household supplies, furniture, furnishings, etc.). This new index number is given in table I instead of the earlier one, and the clothing index number has been added to table III. Prices for food and heating and lighting are quoted by correspondents of the *Labour Gazette*. In addition the Dominion Bureau of Statistics has itself since 1921 secured figures for food from retail dealers.

For rent, reports of correspondents are checked by special inquiries made from time to time. For clothing, household supplies, furniture, etc., the prices are reported by a number of representative retail dealers. Systems of weighting: theoretical pre-war budget. In tables I and III the base is 1914, no figures having been published for July 1914; the index numbers from 1914 to 1919 refer to December. In the other tables (II, IV, and V) the index numbers refer to the 15th of the month until the end of 1920, and the 1st of the month after the month in question from January 1921 onwards. They have been calculated by the International Labour Office from the published figures giving the expenditure in dollars for a normal family, with July 1914 as base.

(2) See *International Labour Review*, Vol. V, No. 4, April 1922, p. 101 et seq.

INDEX NUMBERS WITH PRE-WAR BASE PERIOD  
(Base shifted to July 1914 = 100 as far as possible)

TABLE I. COST OF LIVING INDEX NUMBERS

Date	South Africa (9 towns)	Germany		Australia (6 towns)	Austria (Vienna)	Belgium (61 towns) (a)	Bulgaria (12 towns)	Canada (60 towns)	Den- mark (100 towns)	United States (51 towns)	Finland (20 towns)
(1)	(2)	(47 towns) (3)	(Berlin) (4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>July</i>											
1914	400	400	400	400	400	400	400	400	400	400	400
1915	403	*	*	408	*	*	*	404	446	405	*
1916	406	*	*	416	*	*	*	449	436	418	*
1917	414	*	*	413	*	*	*	443	455	442	*
1918	418	*	*	418	*	*	*	461	482	474	*
1919	426	*	*	429	*	*	*	479	241	477	*
1920	459	842	4125	453	*	453	*	204	262	247	944
<i>1921</i>											
Jan.	453	944	4122	*	*	450	4618	*	264	*	4065
Feb.	449	904	4090	*	*	438	4596	*	*	*	4043
Mar.	447	904	4035	458	400	444	4506	477	*	*	4027
Apr.	444	894	976	*	*	399	4564	*	*	*	4008
May	441	880	990	*	*	389	4570	*	*	480	4012
June	436	896	1080	449	9800	384	4666	463	*	*	4051
July	433	963	4125	*	*	379	4612	*	237	*	4439
Aug.	430	1045	4177	*	*	384	4762	*	*	*	4475
Sept.	430	1062	4212	443	*	386	4896	465	*	477	4205
Oct.	428	1446	4340	—	*	394	2038	*	*	*	4208
Nov.	427	1397	4767	—	20500	394	2449	*	*	*	4462
Dec.	424	1550	4934	—	59400	393	2187	461	*	474	4403
<i>1922</i>											
Jan.	—	4640	4903	—	—	387	—	—	212	—	4055
Feb.	—	4989	2477	—	—	380	—	—	—	—	—
Mar.	—	—	—	—	—	371	—	—	—	—	—
Apr.	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—

TABLE II. FOOD INDEX NUMBERS

Date	South Africa (9 towns)	Germany		As- tralia (5 towns)	Austria (Vienna)	Belgium (61 t.) (a)	Canada (60 towns)	Den- mark (100 towns)	United States (51 towns)	Finland (20 towns)	France (a)	
(1)	(2)	(47 towns) (3)	(Berlin) (4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(Paris) (12)	(310 t.) (13)
<i>July</i>												
1914	400	400	400	400	400	400	400	400	400	400	400	400
1915	407	*	*	418	*	*	405	428	98	*	420	423
1916	416	*	*	430	*	*	414	446	409	*	429	442
1917	428	*	*	422	*	*	457	466	443	*	483	484
1918	434	*	*	432	*	*	475	487	464	*	206	244
1919	439	*	*	446	*	*	486	242	486	*	264	289
1920	497	4156	479	*	*	459	227	253	245	982	373	388
<i>1921</i>												
Jan.	472	4265	49	*	*	493	490	276	469	4474	440	*
Feb.	465	4191	57	*	*	482	478	*	455	4407	382	*
Mar.	460	4188	46	484	8100	434	472	*	454	4437	358	429
Apr.	456	4172	235	*	*	447	465	*	449	4407	328	*
May	452	4154	449	468	9800	449	448	*	442	4447	317	*
June	444	4154	441	*	*	440	454	*	444	4447	342	363
July	439	4215	592	*	*	427	459	236	445	4278	306	*
Aug.	434	41653	458	*	*	423	455	*	452	4324	347	*
Sept.	433	41796	*	20700	*	434	449	*	450	4359	329	350
Oct.	431	2227	*	*	*	442	448	*	450	4357	331	*
Nov.	429	2544	442	60300	*	448	449	*	449	4286	326	*
Dec.	425	—	—	—	—	438	449	*	447	4498	323	349
<i>1922</i>												
Jan.	421	2622	—	—	—	447	443	497	439	4423	349	—
Feb.	—	3051	—	—	—	399	442	—	—	4415	307	—
Mar.	—	—	—	—	—	—	—	—	—	—	—	—
Apr.	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—	—

(a) For the countries only, the index numbers in tables I and II are entirely distinct.  
The sign \* means "no figures published".  
The sign — means "figures not available".

INDEX NUMBERS WITH PRE-WAR BASE PERIOD  
(Base shifted to July 1914 = 100 as far as possible)

TABLE I (cont.). COST OF LIVING INDEX NUMBERS

France (Paris) (a)	India (Bombay)	Italy (Rome) (Milan)		Norway (30 towns)	New Zealand (25 towns) (a)	Nether- lands (Amsterdam) (a)	Poland (Warsaw)	United Kingdom (530 towns)	Sweden (40 towns)	Switzer- land (23 towns)	Date
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
100	100	100	100	100	100	100	100	100	100	100	July
*	*	99	*	117	107	*	*	125	*	119	1914
*	*	116	*	146	111	*	*	148	139	140	1915
*	*	146	*	190	119	142	*	180	166	180	1916
*	*	197	286	253	127	183	*	203	219	229	1917
238	*	205	280	275	132	195	*	208	257	261	1918
341	189	313	441	302	149	217	*	255	270	253	1919
											1920
*	169	374	571	*	*	*	14084	251	*	237	1921
*	162	379	566	*	*	*	17024	241	*	234	Jan.
338	160	384	568	304	160	*	17974	233	249	231	Feb.
*	160	411	578	*	*	*	17244	228	*	212	Mar.
*	167	396	574	*	*	*	17909	219	*	210	Apr.
307	173	390	506	302	157	*	20270	219	236	214	May
*	177	387	494	*	*	*	25709	222	*	209	June
*	180	391	501	*	*	*	30407	220	*	206	July
295	185	400	520	296	156	*	39817	210	231	200	Aug.
*	183	415	535	*	*	*	48656	203	*	198	Sept.
*	182	423	544	*	*	*	47628	199	*	192	Oct.
297	179	423	539	283	149	*	46740	192	216	189	Nov.
											Dec.
—	173	430	523	*	—	*	46883	188	*	179	1922
—	165	—	522	*	—	*	—	186	*	177	Jan.
—	—	—	—	257	—	*	—	—	195	—	Feb.
—	—	—	—	—	—	*	—	—	—	—	Mar.
—	—	—	—	—	—	*	—	—	—	—	Apr.
—	—	—	—	—	—	*	—	—	—	—	May
—	—	—	—	—	—	*	—	—	—	—	June

TABLE II (cont.). FOOD INDEX NUMBERS

India (Bombay)	Italy (Rome) (Milan)		Norway (30 towns)	New Zealand (25 towns) (a)	Nether- lands (Amsterdam) (a)	Poland (Warsaw)	United Kingdom (530 towns)	Sweden (40 towns)	Switzer- land (23 towns)	Czecho- slovakia (30 towns)	Date
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
100	100	100	100	100	100	100	100	100	100	100	July
*	95	*	123	112	114	*	132	124	119	*	1914
*	111	151	153	119	117	*	161	136	141	*	1915
*	137	210	203	127	146	*	204	171	179	*	1916
*	203	321	271	139	175	*	210	265	222	*	1917
*	206	304	290	144	196	*	209	312	250	*	1918
*	318	445	319	167	210	*	262	288	239	*	1919
											1920
163	367	571	334	178	193	25140	263	275	224	1643	1921
156	376	564	308	175	194	31827	249	255	221	1494	Jan.
154	386	582	299	169	193	32883	238	247	218	1423	Feb.
134	432	598	300	109	187	31711	232	242	211	1450	Mar.
162	421	598	292	168	184	32640	218	232	208	1456	Apr.
109	409	523	290	166	180	35393	220	231	213	1445	May
174	402	506	295	164	180	45655	226	230	207	1346	June
177	417	518	297	163	179	53100	225	234	204	1362	July
183	430	545	290	161	179	60728	210	228	198	1474	Aug.
180	461	561	288	156	168	75174	200	218	196	1519	Sept.
179	459	570	281	152	154	75848	195	210	189	1514	Oct.
176	458	567	268	150	150	74626	185	202	187	1544	Nov.
											Dec.
169	469	553	257	147	148	73684	179	189	176	—	1922
160	—	562	245	145	150	—	177	188	173	—	Jan.
—	—	—	238	141	—	—	—	185	—	—	Feb.
—	—	—	—	—	—	—	—	—	—	—	Mar.
—	—	—	—	—	—	—	—	—	—	—	Apr.
—	—	—	—	—	—	—	—	—	—	—	May
—	—	—	—	—	—	—	—	—	—	—	June

(a) For these countries only, the index numbers in tables I and II are entirely distinct.  
The sign \* signifies "no figures published".  
The sign — signifies "figures not available".

INDEX NUMBERS WITH PRE-WAR BASE PERIOD  
(Base shifted to July 1914 = 100 as far as possible)

TABLE III. CLOTHING INDEX NUMBERS

Date	Germany (Berlin)	Austria (Vienna)	Canada	Denmark (100 towns)	United States (32 towns)	Finland (20 towns)	France (Paris)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
July 1914	100	100	100	100	100	100	100
» 1915	*	*	125	110	105	*	*
» 1916	*	*	143	160	120	*	*
» 1917	*	*	167	190	149	*	*
» 1918	*	*	198	260	205	*	*
» 1919	*	*	234	310	215	*	296
» 1920	1816	*	260	355	288	1049	485
Sept. 1920	1197	*	*	*	*	1100	518
Dec. »	1197	*	235	292	259	1126	445
Mar. 1921	1077	15400	195	*	*	1031	398
June »	1077	18500	173	248	223	1032	353
Sept. »	1197	38400	173	*	192	1090	318
Dec. »	2188	111300	173	225	184	1107	318

TABLE IV. HEATING AND LIGHTING INDEX NUMBERS

Date	South Africa (9 towns)	Germany (Berlin)	Austria (Vienna)	Canada (60 towns)	Denmark (100 t.)	United States (32 t.)	Finland (20 t.)	France (Paris)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
July 1914	100	100	100	100	100	100	100	100
» 1915	100	*	*	97	130	101	*	*
» 1916	111	*	*	99	175	108	*	*
» 1917	115	*	*	126	220	124	*	*
» 1918	128	*	*	148	275	148	*	*
» 1919	131	*	*	156	292	146	*	164
» 1920	155	1158	*	193	563	172	1232	296
Sept. 1920	—	1158	*	207	*	*	1374	349
Dec. »	—	1211	*	220	578	195	1443	349
Mar. 1921	176	1211	5000	208	*	*	1266	319
June »	—	1316	5300	196	401	182	1283	308
Sept. »	—	1368	10700	190	*	181	1264	307
Dec. »	—	2158	34000	186	333	181	1262	306

TABLE V. RENT INDEX NUMBERS

Date	South Africa (9 t.)	Germany (Berlin)	Australia (6 t.)	Austria (Vienna)	Canada (60 t.)	Denmark (100 t.)	United States (32 t.)	Finland (20 t.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
July 1914	100	100	100	100	100	100	100	100
» 1915	97	*	94	*	85	100	102	*
» 1916	96	*	94	*	84	102	102	*
» 1917	97	*	95	*	90	105	100	*
» 1918	105	*	99	*	100	108	109	*
» 1919	110	*	105	*	109	113	114	*
» 1920	116	164	115	*	132	130	135	335
Sept. 1920	—	164	117	*	134	*	*	374
Dec. »	—	164	120	*	137	130	151	389
Mar. 1921	116	164	120	200	138	*	*	418
June »	—	164	121	380	141	141	159	535
Sept. »	—	182	123	600	143	*	160	596
Dec. »	—	182	—	600	143	141	161	603

The sign \* signifies "no figures published".  
The sign — signifies "figures not available".

INDEX NUMBERS WITH PRE-WAR BASE PERIOD  
(Base shifted to July 1914 = 100 as far as possible)

TABLE III (cont.). CLOTHING INDEX NUMBERS

India (Bombay)	Italy		Norway (30 towns)	United Kingdom (97 towns)	Sweden (40 towns)	Date	
	(Rome)	(Milan)					
(9)	(10)	(11)	(12)	(13)	(14)	(15)	
100	100	100	100	100	100	July	1914
*	—	*	107	125	*	»	1915
*	—	*	157	155	160	»	1916
*	—	*	205	200	210	»	1917
*	261	284	304	310	285	»	1918
*	—	221	388	360	310	»	1919
299	466	651	336	430	390	»	1920
299	—	746	345	430	390	Sept.	1920
284	621	782	348	390	355	Dec.	»
239	576	696	308	325	295	Mar.	1921
263	495	532	292	290	270	June	»
268	—	534	280	265	250	Sept.	»
261	—	553	271	250	240	Dec.	»

TABLE IV (cont.). HEATING AND LIGHTING INDEX NUMBERS

India (Bombay)	Italy		Norway (30 t.)	New Zealand (4 towns)	United Kingdom (30 t.)	Sweden (40 towns)	Switzerland (23 towns)	Date	
	(Rome)	(Milan)							
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
100	100	100	100	100	100	100	100	July	1914
*	—	*	134	102	—	115	115	»	1915
*	—	*	204	108	—	157	129	»	1916
*	—	*	348	123	—	218	132	»	1917
*	160	220	476	136	—	293	302	»	1918
*	—	220	316	145	—	295	372	»	1919
151	178	611	477	177	230	386	387	»	1920
151	—	687	601	182	240	400	398	Sept.	1920
184	225	886	568	192	240	380	365	Dec.	»
176	279	1054	388	194	240	316	357	Mar.	1921
177	245	899	366	199	260	264	220	June	»
176	—	899	337	200	238	231	221	Sept.	»
174	—	828	311	195	225	207	218	Dec.	»

TABLE V (cont.). RENT INDEX NUMBERS

France (Paris)	India (Bombay)	Italy		Norway (30 t.)	New Zealand (25 t.)	United Kingdom (25 t.)	Sweden (40 t.)	Date	
		(Rome)	(Milan)						
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
100	100	100	100	100	100	100	100	July	1914
*	*	—	*	103	101	—	*	»	1915
*	*	—	*	106	100	—	108	»	1916
*	*	—	*	109	102	—	112	»	1917
*	*	100	100	110	104	—	112	»	1918
100	*	100	100	123	107	—	120	»	1919
100	165	100	108	147	116	118	130	»	1920
100	165	—	108	155	117	139	155	Sept.	1920
100	165	143	139	155	117	142	155	Dec.	»
100	165	143	139	161	121	144	155	Mar.	1921
110	165	157	139	161	121	145	155	June	»
121	165	—	139	166	129	152	163	Sept.	»
133	165	—	184	166	129	155	163	Dec.	»

The sign \* signifies "no figures published".  
The sign — signifies "figures not available".

INDEX NUMBERS WITH POST-WAR BASE PERIOD  
(Base shifted to December 1920 = 100 as far as possible)

TABLE VI. COST OF LIVING INDEX NUMBERS

Date	Italy		Netherlands		Poland		
	Milan	Florence	The Hague	Amsterdam	33 towns	Lodz	Posen
Dec. 1920	100	100	100	100	*	*	100
Jan. 1921	105	101	*	*	100	*	110
Feb. »	107	102	*	*	120	100	119
Mar. »	108	106	95	95	121	98	122
April »	111	109	*	*	119	93	137
May »	112	108	*	*	118	86	141
June »	100	100	95	94	137	96	185
July »	97	96	*	*	175	135	337
Aug. »	97	98	*	*	200	152	467
Sept. »	101	99	94	90	255	246	645
Oct. »	103	105	*	*	—	—	—
Nov. »	104	107	*	*	—	—	—
Dec. »	103	107	92	86	—	—	—
Jan. 1922	99	105	—	*	—	—	—
Feb. »	99	104	—	—	—	—	—
March »	—	—	—	—	—	—	—

TABLE VII. FOOD INDEX NUMBERS

Date	Austria	Italy		Netherlands	
	Vienna	Milan	Florence	The Hague	Amsterdam
Dec. 1920	*	100	100	100	100
Jan. 1921	100	105	102	*	*
Feb. »	114	106	102	*	*
Mar. »	123	112	110	98	95
April »	119	117	111	*	*
May »	126	119	113	*	*
June »	153	108	104	102	96
July »	147	103	97	*	*
Aug. »	172	103	100	*	*
Sept. »	226	108	103	99	88
Oct. »	337	111	112	*	*
Nov. »	578	112	115	*	*
Dec. »	—	111	115	96	84
Jan. 1922	—	109	111	—	—
Feb. »	—	107	109	—	—
March »	—	—	—	—	—

TABLE VIII. INDEX NUMBERS FOR OTHER GROUPS

Date	Clothing				Heating and Lighting				Rent			
	Italy		Netherlands		Italy		Netherlands		Italy		Netherlands	
	Milan	Florence	The Hague	Amsterdam	Milan	Florence	The Hague	Amsterdam	Milan	Florence	The Hague	Amsterdam
Dec. 1920	100	100	100	100	100	100	100	100	100	100	100	100
Mar. 1921	89	100	79	86	118	106	95	97	100	100	101	101
June »	68	79	73	79	101	88	83	87	100	100	109	111
Sept. »	68	79	71	77	101	88	88	86	100	110	113	113
Dec. »	73	78	72	71	93	91	84	75	100	110	114	115

The sign \* signifies « no figures published ».  
The sign — signifies « figures not available ».



TABLE IX. COMPARISON OF INDEX NUMBERS OF THE COST OF LIVING AND OF THE  
MAIN GROUPS OF COMMODITIES IN CERTAIN COUNTRIES

(Base shifted to July 1914=100 as far as possible)

Country and group	1919				1920				1921			
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
<b>CANADA (¹)</b>												
Cost of living	*	*	*	179	*	<b>201</b>	*	192	177	163	165	161
Foodstuffs	178	187	195	204	215	<b>230</b>	215	202	180	152	164	150
Clothing	*	*	*	234	*	<b>260</b>	*	235	195	173	173	173
Heating and lighting	157	157	162	166	175	191	207	<b>218</b>	209	197	189	187
Rent	103	111	114	117	118	134	134	139	139	143	144	<b>145</b>
<b>DENMARK</b>												
Cost of living	*	211	*	242	*	262	*	<b>264</b>	*	237	*	212
Foodstuffs	*	212	*	251	*	253	*	<b>276</b>	*	236	*	197
Clothing	*	310	*	331	*	<b>355</b>	*	292	*	248	*	225
Heating and lighting	*	292	*	392	*	563	*	<b>578</b>	*	401	*	333
Rent	*	113	*	120	*	130	*	130	*	<b>141</b>	*	<b>141</b>
<b>UNITED STATES</b>												
Cost of living	*	177	*	199	*	<b>217</b>	*	200	(*)		*	174
Foodstuffs	175	184	188	197	200	<b>219</b>	203	178	156	145	153	150
Clothing	*	215	*	269	*	<b>298</b>	*	259	*	223	*	184
Heating and lighting	*	146	*	157	*	172	*	<b>195</b>	*	182	*	181
Rent	*	114	*	125	*	135	*	151	*	159	*	<b>161</b>
<b>FRANCE (PARIS)</b>												
Cost of living	*	238	*	*	295	341	363	<b>370</b>	338	307	295	297
Foodstuffs	*	260	*	*	306	344	358	<b>389</b>	350	323	310	310
Clothing	*	296	*	*	405	485	<b>518</b>	445	398	353	348	348
Heating and lighting	*	164	*	*	200	296	<b>349</b>	<b>349</b>	319	308	397	306
Rent	*	100	*	*	100	100	100	100	100	110	121	<b>133</b>
<b>INDIA (BOMBAY)</b>												
Cost of living	*	*	*	*	*	*	<b>192</b>	181	160	173	185	179
Foodstuffs	*	*	*	*	*	*	<b>193</b>	178	154	169	183	176
Clothing	*	*	*	*	*	*	<b>299</b>	284	239	263	268	261
Heating and lighting	*	*	*	*	*	*	151	<b>184</b>	176	177	176	174
Rent	*	*	*	*	*	*	165	165	165	165	165	165
<b>NORWAY</b>												
Cost of living	262	263	285	289	288	302	331	<b>335</b>	301	302	296	283
Foodstuffs	278	269	277	279	298	311	335	<b>342</b>	299	290	290	268
Clothing	357	388	439	<b>444</b>	322	336	345	348	308	292	280	271
Heating and lighting	318	316	358	388	407	477	<b>601</b>	563	388	366	337	311
Rent	117	123	123	129	187	147	155	155	161	161	<b>166</b>	<b>166</b>
<b>NETHERLANDS (²)</b>												
Cost of living	*	*	*	*	100	102	<b>107</b>	104	98	97	93	89
Foodstuffs	*	*	*	*	100	103	<b>111</b>	111	105	106	98	93
Clothing	*	*	*	*	100	104	<b>107</b>	87	75	68	66	61
Heating and lighting	*	*	*	*	100	96	102	<b>106</b>	103	92	91	80
Rent	*	*	*	*	100	101	102	106	107	118	120	<b>121</b>
<b>UNITED KINGDOM</b>												
Cost of living	210	208	220	225	232	252	261	<b>265</b>	233	219	210	192
Foodstuffs	213	209	222	236	235	258	270	<b>278</b>	238	220	210	185
Clothing	360	360	360	370	415	<b>430</b>	<b>430</b>	<b>390</b>	325	290	265	250
Heating and lighting	—	—	—	185	230	240	240	240	240	<b>260</b>	231	225
Rent	100	100	100	100	110	118	139	142	144	145	152	<b>155</b>
<b>SWEDEN</b>												
Cost of living	265	257	257	259	265	270	<b>281</b>	271	249	236	231	216
Foodstuffs	<b>327</b>	318	311	307	287	287	298	286	217	231	228	202
Clothing	320	310	330	345	370	<b>390</b>	<b>390</b>	395	295	270	250	240
Heating and lighting	120	120	130	130	130	130	155	155	155	155	<b>163</b>	<b>163</b>

(¹) Base : 1913 = 100.

(²) Figures for May 1921.

(²) Base : March 1920 = 100.

## Wholesale Prices in Various Countries

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As will be seen from the table on p. 779, the level of wholesale prices in the great majority of the countries in the world continued to fall in the early months of 1922. The rate of fall seems, however, to have slackened and in certain cases even ceased. If the countries are roughly arranged into groups according to the level of prices at the present time compared with 1913, they may be classed as follows :

(1) Countries where prices have shown a considerable decline since 1920 and now stand at a level of 50 to 100 per cent. above pre-war prices. These may be distinguished into non-European countries and European countries. In the first class are the United States, Canada, Australia, South Africa, Egypt, and Japan. In the United States the wholesale price index number has fluctuated since April 1921 very slightly about a level of 50 per cent. above the 1913 level. In South Africa, the lowest increase of any country in the world is noticed, viz. 31 per cent. above the level of 1913. In the class of European countries are the United Kingdom and 4 ex-neutral countries (the Netherlands, Sweden, Switzerland, and Denmark), where the price level is between 50 and 100 per cent. above the pre-war level. In all these countries, the index numbers have shown a steady decline during the last months of 1921 and the early months of 1922. In Denmark only is a slight rise shown in February 1922.

(2) Countries whose price levels are from two to six times their levels in 1913. This group includes Norway, and the ex-belligerent countries of France, Belgium, and Italy. In Belgium the price level has remained almost stationary for several months at about 370, compared with 100 in 1914, and in France and Italy the latest figures show a drop.

(3) In the last group, Germany forms a class by itself. Prices are continually and sharply rising and are now between 40 and 50 times their peace level—a phenomenon due to special economic and political reasons and the considerable depreciation of its currency. Price movements in Austria and Poland, as well as some other Central European countries, probably show similar movements though no reliable indices of wholesale prices exist for these countries.

China is omitted from the above notes as the index number has the year 1919 for base ; also India and New Zealand for which no recent data are available.

In the following table, the index numbers of the movement of wholesale prices in the chief countries are given for each year from 1913 to 1921 and for each month from January 1921. As far as possible, the index numbers are given on a uniform base, the level of prices in 1913 being taken as 100.

### NOTE ON THE METHODS OF COMPILING THE INDEX NUMBERS OF WHOLESALE PRICES

Index numbers of wholesale prices are intended to provide a measure of the changes in the purchasing power of money. The prices of a number of



commodities at a certain date are therefore combined so as to show the general movement of the prices of all the commodities with reference to another date. For this purpose a certain period is chosen as "base", and the price-level at this period is put equal to 100. The changes in the corresponding prices for the other periods are then observed, and the relative increase or decrease is calculated for each commodity. The two kinds of mean most generally used are the arithmetic mean (the result of dividing the sum of all the relative prices by their number) and the geometric mean (the root of the product of the various prices, the degree of the root being equal to the number of relative prices). Since the economic importance of the commodities varies, it is generally necessary, in calculating index numbers, to use a process of "weighting": each price is first multiplied by a "weight" proportional to the importance of the commodity in production or consumption, and the sum of these products is then taken (direct weighting). A shorter and simpler method of weighting is to include several quotations for the important commodities, referring either to different markets or to different qualities or grades, or else to different stages in the manufacture of the same article (for instance, raw cotton, yarn, and piece goods). The method of multiple quotations is frequently used when geometric means have to be calculated. The base period adopted is as a rule fixed, and covers one or more "normal" years. In the "chain system", however, the base is variable, and the relation of the month or year in question to the period immediately preceding is found. At a later stage any of these successive bases may be taken as the initial base of the series.

In the above table the base has been shifted to 1913 = 100 whenever possible. Some countries have had to be excepted, for which there are no available data for that year. In order to shift the base, the index numbers for the various dates are divided by the 1913 index number. This introduces a small mathematical error in dealing with index numbers which are averages of relative prices, such as those of, e.g., Canada, France, and Italy. A slightly different and more accurate result would be obtained by calculating the relative price of each article with reference to the new base, and taking the average of these relative prices for the index number.

The sources from which the figures are taken and the methods of compilation used in each country have been indicated in a series of notes on the different countries at the end of the same article in the last number of the *Review*<sup>(1)</sup>. Most of the recent figures have been supplied by the Economic and Financial Section of the Secretariat of the League of Nations.



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(1) See *International Labour Review*, Vol. V, No. 4, April 1922, pp. 618 et seq.

# EMPLOYMENT AND UNEMPLOYMENT

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## Statistics of Unemployment

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THE tables giving statistics of unemployed in the different countries which were published in the last numbers of the *Review* have been continued in the present issue and brought up to date. In most countries figures for the end of February 1922 show a slight decrease compared with the previous months. This decrease is due to a certain extent to the improvement of work in the building trades which often occurs at this time. This is not the case with Germany, where the abnormally low percentage of unemployed at the end of 1921 (1.6 per cent.) has risen to a figure of 3.3 per cent. at the end of January 1922. In the Netherlands the figures show a substantial increase of unemployment ever since October 1921, due partly to the great slackness of employment amongst diamond workers. In Vienna the apparent increase of unemployment which is shown by the figures for January is partly due to the fact that in connection with the abolition of food subsidies, the difference between the new and the old price of bread was paid to unemployed workers from the beginning of January. In Canada, Belgium, the United States, France, Sweden, and the United Kingdom the latest figures available show an improvement as compared with the previous month. In India, where unemployment exists chiefly as a result of famine, the number of persons on famine relief shows a great improvement in December and January as compared with previous months.

Table I shows the percentage of unemployed among trade unionists and among workers insured against unemployment for all the countries which publish information of this nature. Table II gives information from other sources in regard to unemployment for Austria (Vienna), France, Italy, Switzerland, and Czechoslovakia. No reliable statistics exist as to the amount of unemployment in the United States. The United States Employment Service publish, however, each month, a report on the state of employment based on the numbers employed by certain establishments. These figures are given in table III, and table IV gives statistics of famine relief in India.

### NOTE TO TABLES AND SOURCES

Though the figures shown in the tables are comparable within each country, they are not to be used for comparisons between different countries, nor can they be taken as representing the total amount of unemployment in a country. Unemployment may exist not in the form of persons out of work, but in the form of persons under-employed (or 'on short time'), and as regards this latter class of unemployment, data are even less complete; in fact, for most countries no statistics of this nature exist. Moreover, any international comparison of unemployment statistics is vitiated by the differences in the definition of unemployment, in the scope and completeness of the returns, and the reliability of the figures. The most important of these differences and the sources used in compiling the tables have been indicated in a series of notes at the end of the same article in the last number of the *Review* <sup>(1)</sup>. The tables do, however, give some indication of the fluctuation of unemployment in the different countries over a period of years.

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(1) See *International Labour Review*, Vol. V, No. 4, April 1922, pp. 626 et seq.

TABLE I. STATISTICS OF UNEMPLOYMENT AMONG TRADE UNIONISTS <sup>(1)</sup>

End of month	Germany	Australia	Belgium	Canada	Denmark	Massachusetts	Norway	Netherlands	United Kingdom		Sweden
									Trade unions	Compulsory insurance	
A. Number of Workers Covered by the Returns (in Thousands)											
1913											
March	2004	237	78	*	110	171	29	62	908	2071	50
June	2010	243	79	*	109	172	29	64	922	2043	53
Sept.	1994	252	76	*	115	177	29	68	943	2218	54
Dec.	1930	251	74	*	118	178	29	70	965	2286	60
1919											
March	2934	311	*	174	286	255	33	263	1243	3561	107
June	3711	303	*	151	293	250	36	304	1334	3561	119
Sept.	4316	308	*	192	310	257	38	314	1418	3721	118
Dec.	4497	317	*	174	311	274	38	394	1541	3721	119
1920											
March	4939	329	*	171	295	281	46	404	1567	3827	126
June	5600	343	*	194	306	248	46	407	1603	4160	126
Sept.	5442	345	118	189	308	255	46	407	1636	4197	151
Dec.	5664	351	546	208	311	297	45	399	1535	11900	146
1921											
Jan.	5751	*	609	198	307	*	50	391	1587	12000	155
Feb.	5650	*	621	198	304	*	52	396	1534	12000	147
March	5779	344	668	207	294	237	51	394	1528	12000	165
April	5510	*	617	204	294	*	53	392	1539	12000	145
May	5784	*	637	201	299	*	79	395	1343	12000	144
June	5841	364	669	182	299	243	89	396	1279	12200	145
July	5753	*	688	183	299	*	81	394	1385	12200	151
Aug.	5680	*	738	189	287	*	77	391	1420	12200	153
Sept.	5965	—	746	183	287	237	74	393	1433	12200	154
Oct.	5960	*	748	174	284	176	—	—	1442	12200	149
Nov.	5912	*	755	164	284	*	—	—	1433	11902	133
Dec.	6103	—	757	161	282	—	—	—	1432	11902	144
1922											
Jan.	5798	*	763	159	—	—	—	—	1406	11902	141
Feb.	—	*	740	—	—	—	—	—	1390	11902	—
B. Percentage of above Workers Unemployed											
1913											
March	2.8	6.4	1.5	—	7.8	8.3	1.8	3.4	1.9	3.5	7.1
June	2.7	7.3	2.1	—	3.7	4.5	0.7	3.9	1.9	2.8	2.6
Sept.	2.7	7.0	3.2	—	3.8	5.0	1.2	4.9	2.3	3.7	2.3
Dec.	4.8	5.3	3.5	—	15.1	8.5	3.7	9.1	2.6	4.6	4.4
1919											
March	3.9	6.5	*	5.6	20.5	11.4	2.2	14.2	2.8	*	7.6
June	2.5	8.5	*	2.6	3.6	2.8	1.1	8.7	1.7	*	6.1
Sept.	2.2	6.2	*	2.2	3.1	2.7	1.2	4.5	1.6	*	3.2
Dec.	2.9	5.2	*	3.5	16.5	4.1	2.6	9.0	3.2	6.58	3.8
1920											
March	1.9	5.6	*	3.4	6.7	4.1	1.5	7.7	1.1	3.6	4.5
June	3.9	6.2	*	2.5	2.0	14.6	0.7	5.9	1.2	2.6	3.4
Sept.	4.5	6.2	5.8	3.3	2.7	16.4	1.8	4.1	2.2	3.8	2.9
Dec.	4.1	7.8	17.4	13.1	15.1	29.2	6.8	13.4	6.0	5.8	15.8
1921											
Jan.	4.5	*	*	13.1	19.7	*	11.3	16.5	6.9	8.2	20.2
Feb.	4.7	*	*	16.1	23.2	*	14.9	16.4	8.5	9.5	20.8
March	3.7	11.4	10.4	16.5	23.6	22.1	16.1	13.9	10.0	11.3	24.6
April	3.9	*	12.1	16.3	21.7	*	17.1	11.9	17.6	15.0	24.2
May	3.7	*	14.4	15.5	18.6	*	17.8	9.4	22.2	17.6	25.3
June	3.0	12.5	9.9	13.2	16.8	20.1	20.9	8.1	23.1	17.8	27.9
July	2.6	*	9.5	9.1	16.7	*	17.9	7.6	16.7	14.8	27.8
Aug.	2.2	*	10.3	8.7	17.7	*	17.3	7.3	16.3	13.1	26.8
Sept.	1.4	11.4	9.6	8.5	16.6	19.1	17.1	6.8	14.8	12.2	26.2
Oct.	1.2	*	7.2	7.4	18.3	21.2	17.1	6.9	15.6	12.8	26.8
Nov.	1.4	*	7.0	11.1	20.8	—	19.3	10.0 <sup>(2)</sup>	15.9	15.7	28.7
Dec.	1.6	9.5	6.6	15.1	25.2	—	—	16.6 <sup>(2)</sup>	16.5	16.2	33.2
1922											
Jan.	3.3	*	6.4	13.9	28.9	—	—	18.5 <sup>(2)</sup>	16.8	16.2	35.6
Feb.	—	*	5.8	10.6	—	—	—	—	16.3	15.7	32.3

(1) For the United Kingdom there is also given the number covered by the Unemployment Insurance Act and the percentage unemployed.

(2) Provisional figures.

The sign \* signifies "no figures published". The sign — signifies "figures not yet received".

TABLE II. OTHER STATISTICS RELATING TO UNEMPLOYMENT

Date (End of month)	Austria (Vienna)		France		Italy		Switzerland		Czecho- slovakia	
	Num- ber of applicants for work	Num- ber of per- sons in receipt of benefit	Num- ber of applicants for work	Num- ber of per- sons in receipt of benefit	Num- ber wholly unem- ployed	Num- ber on short time	Num- ber wholly unem- ployed	Num- ber on short time	Num- ber of applicants for work	Num- ber of per- sons in receipt of benefit
<i>1921</i>										
January	26,344	42,953	39,844	71,774	*	*	34,652	71,922	95,254	57,047
February	26,840	41,406	44,092	89,289	*	*	42,705	82,930	105,344	59,025
March	24,345	7,894	44,061	88,382	*	*	47,577	95,419	102,180	53,086
April	22,993	8,143	35,270	75,569	250,145	69,270	47,949	95,374	99,896	48,623
May	25,484	8,697	28,248	60,362	*	*	52,635	87,741	107,934	47,203
June	27,404	9,796	21,316	53,439	388,744	238,940	54,031	76,416	403,170	46,128
July	25,446	10,046	20,270	37,226	435,194	226,515	55,605	79,888	—	40,844
August	23,689	9,595	20,350	27,467	470,542	220,763	63,482	74,309	—	36,079
September	22,525	8,547	17,718	20,408	473,216	154,350	66,646	69,424	—	26,448
October	20,083	7,608	44,969	16,548	492,348	131,167	74,238	59,835	—	19,748
November	18,853	6,834	49,590	12,374	512,260	181,002	80,692	56,569	—	23,607
December	17,742	9,327	17,373	9,002	544,779	173,662	88,967	53,970	—	—
<i>1922</i>										
January	28,755	46,408	18,535	9,068	606,849	159,234	97,094	49,481	—	—
February	—	—	18,807	9,780	—	—	99,544	46,764	—	—
March	—	—	16,605	7,915	—	—	—	—	—	—

TABLE III. VOLUME OF EMPLOYMENT IN THE UNITED STATES, BY MONTHS, 1921

Date	Numbers employed by 1,428 firms, to nearest thousand	Percent. increase (+) or decrease (—) on previous month	Index of employment. (January 1921 = 100)
<i>1921</i>			
January	4,628,000	—	100.0
February	4,613,000	— 4.00	99.1
March	4,588,000	— 4.50	97.5
April	4,584,000	— 0.40	97.1
May	4,574,000	— 0.45	96.7
June	4,527,000	— 2.90	93.8
July	4,510,000	— 1.40	92.8
August	4,526,000	+ 1.08	93.7
September	4,515,000	+ 1.20	94.9
October	4,560,000	+ 1.04	95.8
November	4,567,000	+ 0.46	96.3
December	4,493,000	— 4.70	94.7
<i>1922</i>			
January	4,557,000	+ 4.2	95.6
February	4,565,000	+ 0.57	96.1

TABLE IV. STATISTICS OF FAMINE RELIEF IN INDIA BY MONTHS 1921

Date	Area under famine relief		Tracts under « scarcity » and « observation and test »	
	Estimated population of affected area	Number on relief	Number of persons on test works	Number of persons in receipt of gratuitous relief
<i>1921</i>				
End of January	5,417,915	40,029	64,967	42,794
» » February	7,240,589	74,004	82,444	34,643
» » March	8,280,445	496,251	45,985	47,733
» » April	10,389,252	236,702	68,885	49,060
» » May	10,409,252	219,926	78,437	60,949
» » June	10,275,252	270,426	42,695	79,369
» » July	10,409,414	246,566	28,583	85,664
» » August	8,745,508	427,987	4,342	65,423
» » September	6,444,888	86,369	3,352	24,129
» » October	4,507,382	49,462	5,325	20,567
» » November	4,256,209	31,374	1,576	11,904
» » December	382,918	7,840	777	4,335
<i>1922</i>				
End of January	303,375	7,170	1,609	991

# LABOUR CONDITIONS

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## Hours of Work in German Industry

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By Royal Decree of 7 December 1921, the Government of the Netherlands appointed a Commission of Enquiry into hours of work in German industry. The following is a translation of the report of this Commission.

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### Report of the Netherlands Commission of Enquiry into Hours of Work in German Industry <sup>(1)</sup>

#### § 1. INTRODUCTION

**R**OYAL Decree No. 33 of 7 December 1921 established a Commission for the purpose of investigating hours of work in industry in Germany. The following members were appointed to this Commission: Mr. J. GOUDRIAAN, Labour Inspector, the Hague; Mr. C. BEETS, secretary of the engineering firm of Stork Brothers & Co., Hengelo; Mr. A. W. JANSEN, director of Visser & Eycken, Ltd., Geldrop; Mr. K. KRUTHOF, president of the National Federation of Christian Trade Unions, the Hague; and Mr. E. KUPERS, secretary of the Netherlands Federation of Trade Unions, Amsterdam. In addition, in response to a request from the Central Council on Labour Problems (*Centraal Overleg in Arbeidszaken*), an employers' organisation, Mr. B. BÖLGER, assistant secretary of this association, took part in the enquiry. The Commission began work in Berlin on Wednesday, 7 December 1921, and returned to Holland on Saturday, 24 December.

At Berlin the Commission got into touch with the Federal Ministry of Labour and with the central organisations of employers and workers. These visits were a means not only of obtaining general information on the subject of the enquiry, but of procuring introductions to the local representatives of employers, workers, and the industrial inspection service. The Commission also made considerable use of personal connections between the employers among its members and certain German firms.

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<sup>(1)</sup> *Bijlage bij de Staatscourant. Zitting 1921-1922. 2. Staatsbegroting voor het Dienstjaar 1922. Hoofdstuk X<sup>a</sup>. Rapport van de commissie van onderzoek naar den arbeidstijd in de Duitsche industrie. No. 17.*



These first general investigations were mostly made by the whole Commission, but for the rest of its work the Commission was divided into three groups of two each, in order to cover a wider area.

Altogether 127 visits of inspection were made in 23 localities, distributed as follows : 28 at Berlin, 3 at Stettin, 1 at Wildau, 7 at Görlitz, 1 at Niesky, 4 at Cottbus, 4 at Dresden, 1 at Pirna, 1 at Heidenau, 15 at Leipzig, 4 at Chemnitz, 4 at Halle, 3 at Jena, 5 at Nuremberg and Fürth, 10 at Munich, 6 at Stuttgart, 8 at Frankfurt-on-Main and Höchst, 5 at Cologne, 6 at München-Gladbach, 5 at Elberfeld-Barmen, 2 at Düsseldorf, 3 at Essen, and 1 at Mülheim-on-Ruhr. A larger number of visits could have been made if the work of the Commission had not been hampered by illness, which put a stop to the work of two of its members from 15 and 16 December respectively and compelled a third member to end his tour on 18 December. As a result, during the last week some investigations were made by a single person only. Of the visits made, 10 were to public authorities, such as labour inspectors, 26 to employers' associations, 49 to trade unions, and 42 to factories. As a general rule, during visits to factories, the members of the Commission did not limit their investigation to interviews with the management, but also conversed with the chairman of the works council and even with engineers or time-keepers, whenever personal relations with the management were such as to make this possible.

Among industries to which particular attention was given were metal and wood working, textiles, printing, and book binding. In addition, particulars were collected regarding the hours of work in brick, tile, glass, and chemical works, the clothing industry, beet sugar mills, and bakeries. The information collected is summarised later in this Report. It should be borne in mind, in examining this information, that the Commission was quite aware that its enquiry must of necessity be limited to a few sample investigations. It considered these sufficient in number and reliability of result, however, to provide a basis for the formation of a general finding on the reduction of hours of work in Germany. They are not, on the other hand, sufficient ground for a final and complete estimate of the actual hours worked in a given branch of industry or a given locality.

A summary of German legislation on hours of work and the methods of its application is given as a preliminary to summarising the information gathered by the Commission.

## § 2. THE GERMAN ORDER ON HOURS OF WORK

Hours of work in German factories and workshops were provisionally limited by the Order of 23 November 1918<sup>(2)</sup> promulgated at the time of the Revolution. This Order should be

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<sup>(2)</sup> *Editorial Note.* An English translation is published in the *Bulletin* of the International Labour Office (Basle), Vol. XIII, p. 8.

regarded as an emergency regulation, which is to be replaced by an Act, the first draft of which appeared in the *Reichs-Arbeitsblatt* for 31 August 1921.

A comparison of the German Order of November 1918 with the Dutch Labour Act of 1919 emphasises certain points which may here be mentioned.

### *Daily and Weekly Maximum Hours*

The German Order limits the working day for workers in all industrial establishments to eight hours. It fixes no weekly limit, but this results automatically from the establishment of the daily maximum, in view of the fact that since 1895, under Section 105 (a-h) of the Industrial Code, Sunday work has been prohibited for all workers in industrial establishments, with certain specific exceptions. These exceptions are practically the same as those mentioned in the Dutch Decree on hours of work. In the great majority of establishments, to which these exceptions do not apply, the working week is thus limited to 48 hours. The remaining establishments are mainly those carrying on continuous processes which must operate on Sunday as well as week-days—for example, sulphuric acid works and electric light and power stations—and in these the working week is limited to 56 hours.

### *Shift System in Continuous Processes*

A working week of 56 hours in no way interferes with continuous processes if the three shift system is adopted, since three shifts of 8 hours equal 7 days of 24 hours. In order to facilitate the regular alternation of shifts, Section 9 of the German Order provides that a worker may, once in three weeks, work 16 consecutive hours, always on condition that during the three weeks he has two rest periods of 24 hours each. The working hours of a shift may therefore be regulated as follows:

First week : 7 shifts of 8 hours = 56 hours.

Second week : 6 shifts of 8 hours = 48 hours.

Third week : 6 shifts of 8 hours + 16 hours = 64 hours.

In practice, this system is sometimes applied, but a large number of the establishments affected carry on their continuous processes by means of three shifts, supplemented by additional workers, so that no worker should be employed for more than 48 hours per week on the average<sup>(3)</sup>.

### *Saturday Half-holiday*

The German Order does not include any provision on this point, but the Saturday half-holiday has been generally adopted by collective agreement, especially in central and southern Germany. Section 2 of the Order authorises the distribution over

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<sup>(3)</sup> See under "Chemical Industry", p. 794.

the other days of the week of the time not worked on Saturday afternoon. Thus the 48-hour week is often made up, not of six days of 8 hours, but either of five days of  $8\frac{1}{2}$  and one of  $5\frac{1}{2}$  hours, or of five days of 9 hours and one of 3. In certain cases, for example in steel mills, the week consists of five days of 9.6 hours. In some industries even this lengthening of the working day during the first five days of the week has been abolished by collective agreement, and the working week has thus been reduced to 44, 45, or 46 hours (4).

### *Definition of Night-Work, Two Shift System*

The German Order does not prohibit night work for adult men, but night work between 8 p. m. and 6 a. m. for young persons under 16 and for women is prohibited under Sections 136 and 137 of the Industrial Code. In spite of this, in establishments employing two or more shifts, women are allowed to work until 10 p. m. on condition that they are granted a minimum rest period of at least 16 consecutive hours. In view of the fact that the regulations for rest periods already prescribe that workers employed for more than 6 hours a day shall be allowed breaks of either one half hour or two quarters of an hour during the day (5), workers in establishments employing two or more shifts actually work no more than  $7\frac{1}{2}$  hours per day.

The use of the two or three shift system in the case of adult male workers is not subject to legislative restrictions and is frequently put into practice when circumstances demand it. The Commission received the impression that, in view of the present economic situation in Germany, neither the individual workers nor the trade unions were opposed to the introduction of the two or three shift system.

### *Preliminary Work and Employment of Furnacemen, Watchmen, etc.*

The German Order makes no special provision for these classes of work, but in the Netherlands, under the Labour Act of 1919, such workers are allowed to work 10 hours a day and either 57 or 60 hours per week. In certain establishments in Germany, among others in public undertakings, the 8-hour day and 48-hour week are applied even to them. A Ministerial Circular of 20 February 1920 permits certain extensions of the working day. No general authorisations are issued; they are given in each individual case, and in no case may the working day be allowed to exceed 10 hours or the working week 60 hours. During its investigation, the Commission gathered that the number of these authorisations was

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(4) See below under "Hours of Work in Different Industries".

(5) The Bill proposes that in establishments employing two or more shifts work shall begin at 5 a. m. instead of 6 a. m. Workers from 16 to 18 years of age will not be allowed to work between 10 p. m. and 5 a. m. except in the iron and steel industry, glass works, paper works, and sugar refineries (Clause 12 of the Bill).

comparatively small, but a great many workers in these establishments are employed for 9 or 10 hours a day without authorisation. It is proposed that the position of these workers shall be fixed by a general provision at the same time as the working day is finally regulated <sup>(6)</sup>.

### *Emergency Overtime* <sup>(7)</sup>

Section 6 of the German Order lays down as a general rule that regulations limiting hours of work "do not apply to temporary work which must be carried out immediately in emergencies". This wording is almost identical with that of Section 105 (c) of the Industrial Code, which authorises Sunday work under the same conditions. The Industrial Code also stipulates that Sunday overtime must be recorded, so that the duration and nature of the work and the number of workers employed may be noted. Records of emergency overtime worked on Sunday must be kept up to date. The new Bill in Clause 18 proposes a similar rule for checking overtime worked on week days in emergencies (*Notstandsfälle*), but the Order of November 1918 at present in force does not mention it.

In order to estimate the importance of Section 6, it is essential to understand the interpretation placed in practice on the word "emergencies". According to the observations of the Commission, "emergency work" covers urgent work and repairs necessitated by breakdown of machinery or stoppage of work. In these cases overtime is worked under Section 6 without application to the authorities, but an agreement is frequently arrived at beforehand with the management of the undertaking. It was frequently noted that the application of this Section has been extended, and that attempts are made to use it as a justification for the execution of other kinds of urgent work outside ordinary working hours. The industrial inspection service, however, is making every effort to enforce as rigid an interpretation as possible.

### *Overtime*

Regulations regarding overtime in the German Order differ from the Dutch regulations in that authorisation of overtime is conditional upon two factors which are not mentioned in the Dutch Act, namely, inability to procure a sufficient number of suitable workers to carry out the special orders, and consent of the works council or workers' committee to the working of overtime <sup>(8)</sup>.

In connection with the first of these two conditions it should be pointed out that the German Order is throughout based on the desire, not only to reduce working hours, but also to use this

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<sup>(6)</sup> Clauses 18 and 21 of the Bill.

<sup>(7)</sup> *Notstandsarbeiten*.

<sup>(8)</sup> Clause 20 of the Bill lays down rather different rules. In place of the consent of the works council, mere consultation of this body is required. Cf. also below, p. 791.

reduction to prevent unemployment. All labour legislation enacted after the Revolution is influenced by this idea. The Order regarding engagement and discharge of workers, for example, lays down in Section 12 that discharge owing to slack business is only permissible when working hours for all workers have been reduced to 24 per week, a process known as "spreading" work (*Streckung der Arbeit*). This regulation has been strictly applied in spite of frequent complaints made by the manufacturers<sup>(9)</sup>. Thus the state of the labour market is a most important factor in determining the reply to be given to requests for authorisation of overtime. In practice, in order to obtain such authorisation, it is necessary to produce a certificate from the employment exchange that the number of suitable workers available is inadequate.

In connection with the second condition, it may be noted that the optional representation of the workers by workers' committees (*Arbeiterausschüsse*) authorised by the Industrial Code was replaced in February 1920, under the Works Councils Act, by statutory representation by works councils elected in each establishment by the workers and employees from among themselves. The opinion of these representatives of workers and employees has to be produced at the same time as the request for authorisation of overtime. The fact that the co-operation of these works councils set up by law is necessary in order to obtain an authorisation of overtime is of the greatest importance in the application of the German regulations on hours of work. This form of representation of the workers now exists in all industrial establishments, but relations between employers and councils depend to a very large extent on personal factors. These relations seem to have improved steadily since the extremist elements on the councils have been overshadowed and replaced by more moderate members.

The attitude of works councils towards authorisations of overtime varies considerably. Some councils systematically reject every request for such authorisation; others support it almost invariably, while others again try to estimate as impartially as possible the technical and economic grounds which may necessitate overtime. The opinion of the works council in the majority of cases certainly has a preponderating influence on the replies given by the labour inspectorate to requests for authorisation of overtime. If the works council rejects the request, the labour inspection service rarely, if ever, grants it, in view of the fact that in such circumstances the workers would very probably refuse to work, and the granting of the authorisation would give rise to useless disputes. If, on the other hand, the request for authorisation is favourably received by the works council, it is in the vast majority of cases granted by the industrial inspection service,

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<sup>(9)</sup> In engaging new workers it is possible to stipulate that the contract of employment only holds for a given period or a given piece of work. Workers engaged on this footing may therefore be discharged unconditionally when the period provided has elapsed.

often without any special enquiry. Reliance is placed on the independent position of members of works councils under the Act, especially on the guarantees against unjustified discharge. It does of course happen occasionally that requests supported by the works councils are refused by the industrial inspection service. In Saxony, for example, according to a statement by the chief labour inspector, of 2,000 requests supported by works councils, 300 were refused. The Commission gained the impression, however, that in other parts of Germany requests supported by the works council and refused by the industrial inspection service are much rarer. A refusal is often due to the fact that, in the opinion of the labour inspectors the workers often agree to work overtime simply in order to increase their earnings, though the general condition of industry not only does not make overtime desirable, but foreshadows an increase in unemployment in the near future.

The trade unions are given no important functions under the Order in connection with the authorisation of overtime, but they can influence the granting or refusal of authorisation indirectly through the works council, which generally includes among its members leaders of the unions. A representative of the trade union is allowed to be present at meetings of the works council when requests for overtime are discussed, but very little use is made of this privilege. The influence of the trade unions makes itself more effectively felt through collective agreements. Many of these agreements fix a working week of less than 48 hours. Some contain a general prohibition of all overtime, or give the trade union a veto on overtime. In view of the fact that in Germany the vast majority of the workers are organised in trade unions, it is clear that the unions can acquire considerable influence by this means. Their power is especially great in northern Germany, for example in Berlin, Saxony, and the Ruhr district, but less so in the South, i. e. in Bavaria, Wurttemberg, and Baden. In Saxony their power has been considerably increased by a Ministerial Circular sent on 10 September 1921 by Mr. Jaeckel to the members of the industrial inspection service, under which all requests for authorisation of overtime must be submitted to the trade unions.

In general the trade unions are opposed to overtime. They fear that provisional authorisations may be renewed indefinitely and amount in the long run to an abolition of the 8-hour day. In Berlin, for example, where their power is very great, overtime is hardly met with except in the form of an occasional lengthening of the normal working day for a few workers who have to finish a given job. Overtime so worked is frequently deducted from the following day (*abgebummelt*), so that the weekly maximum is not exceeded. In other parts of Germany this practice is less frequent or entirely unknown. In southern Germany, Saxony, and the Ruhr district, the trade unions are not so definitely opposed to overtime, provided there is no unemployment in industry. This attitude is partly accounted for by the

desire of the worker to increase his earnings after a long period of unemployment, and to allow for the steady increase in the cost of living. Attention has already been called to the attitude of the labour inspectorate to the question of overtime.

Reasons advanced in Germany in applying for authorisation of overtime may be divided into three classes: (1) temporary irregularity in the working of the establishment; (2) seasonal rush of work; (3) exceptional rush of orders, especially of foreign orders. One reason for applying for the authorisation of overtime, which is very frequently met with in the Netherlands, is still quite unknown in Germany, owing to the present situation. This reason is the need of increasing working hours in order to reduce costs of production. Germany is still going through a period of inflation, low exchanges, and steady increase in prices, which afford many opportunities for making special profits. Employers have even been known to offer higher pay for overtime than that fixed by collective agreement, simply in order to overcome the opposition of the trade unions.

Overtime due to temporary irregularities in the working of an establishment, as has already been pointed out, can usually be worked under the regulations regarding emergency overtime (*Notstandsarbeiten*). There is thus no legal compulsion to apply either to the works council or to the industrial inspection service, but a number of employers, even in such cases, come to an agreement with the works council.

When the overtime cannot be described as emergency overtime, the employer often arranges it in agreement with his works council, but without applying for the authorisation of the industrial inspection service. This action is harmless from the point of view of maintaining the 8-hour day, and is often most valuable in keeping the establishment in good working order. In the printing and lithographic trades, for example, a few men occasionally work an hour or half an hour of overtime, in order to finish machining off a job that they would otherwise have to make ready again the next day. In newspaper works some compositors sometimes work half an hour or an hour of overtime to finish setting up late news. In one engineering works an agreement has been arrived at with the works council under which a small number of workers in different shops are allowed to work overtime, provided that the maximum of hours is not exceeded over a period of three weeks. Under this agreement it is possible to complete certain parts rapidly where otherwise there would be a delay in assembling. Arrangements of this kind are made without official authorisation, but according to statements by the industrial inspection service they would certainly be legalised if applications for authorisation were submitted.

Authorisations of overtime in cases of a seasonal rush of work are almost always granted, when reasonable grounds can be shown.

Authorisations of overtime in cases of a rush of work due to an exceptionally large flow of orders are readily granted, espe-

cially when foreign orders are on hand. Such work is considered as serving the economic interests of Germany. Authorisation is always granted in the case of a foreign order which must be completed by a given date and would be lost if overtime were not allowed. Less readiness is shown when the exceptional rush of work begins to decrease and a slack period may be anticipated. These authorisations generally allow only eight or ten hours' overtime per week for a maximum period of four consecutive weeks, which may, however, be prolonged.

Ordinarily the industrial inspection service authorises directly overtime necessitated by special conditions, when the period does not exceed two consecutive weeks. For a longer period authorisation is granted by the demobilisation commissioner, whose functions are generally discharged by the governor (*Regierungspräsident*) of the province, after consultation with the industrial inspection service.

In most of the States the authorisation makes no mention of wage rates, which are already determined by collective agreement. In Saxony clauses of the collective agreement bearing on this subject are usually quoted in the authorisation. In Wurtemberg an increase of 25 per cent. is prescribed when it is not already laid down in the collective agreement. Clause 20 of the new Bill makes this increase of 25 per cent. a general rule.

Except in the cases already mentioned, i. e. the work of porters, furnacemen, and engineers, and temporary overtime for a short period, we gathered the impression that in the large and medium-sized establishments very little overtime was worked without authorisation. In this as in other matters, however, there were great differences between the States. In one State of southern Germany the industrial inspection service states that illegal overtime is probably worked to a greater extent than that officially countenanced by the authorities. The works councils, we were told, were relied on to keep a check on this, as they would certainly oppose it and make complaints if there was any abuse of overtime.

### *Administrative Provisions*

Section 107 of the Industrial Code lays down regulations for minors similar to those in the Netherlands requiring employment certificates for young persons. It is not necessary to keep time registers. The time tables only regulate general hours and breaks for the whole body of workers, and do not provide for the smaller groups of workers whose hours are fixed by special regulation. It is only necessary to keep records of overtime when it is worked on Sunday, but Clause 18 of the new Bill proposes that all overtime on weekdays should be compulsorily recorded.

### § 3. HOURS OF WORK IN CERTAIN INDUSTRIES

Under this heading is given a summary of the provisions of collective agreements and of the actual hours of work noted in December 1921. On the latter point account must be taken of the



fact that at this time certain industries were unusually busy owing to a sudden influx of home and foreign orders, following the fall in the mark and partly due to the opening of the Christmas season. Attention must be called to the reservation made at the beginning of this Report, and to the fact that the enquiry was of necessity mostly limited to the large towns.

### *Glass and Pottery Industries* <sup>(10)</sup>

In the white glass trades, the working week is usually 48 hours, though some factories work  $7\frac{1}{2}$  hours per day and 46 hours per week. The two shift system is occasionally used, but never three shifts, except for furnacemen, melters, etc. Overtime is exceptional and some factories are closed down. Machine-made bottle factories work on the three shift system. Glass cutters work 48 hours at Berlin and Dresden and 45 at Fürth near Nuremberg. Overtime does not occur.

In brick or tile works authorisation may be obtained under a Ministerial Circular to work ten hours per day and 58 hours per week, but this circular only refers to seasonal undertakings and not those which work all the year round. This permission to work 58 hours per week is not generally utilised. In the Rhineland a great many workers in brick works do not work over 54 hours, or those in tile works over 48 hours. The Ministerial Circular does not apply to furnacemen, who should therefore work in three shifts. In some places, however, they still work in two shifts.

### *Printing and Book Trades*

Printers, lithographers, and book binders work 48 hours per week under collective agreement. In book binding there are a number of works, especially at Leipzig and Stuttgart, which ordinarily work 46 hours per week. Under Article 3 of the collective agreement this limit may only be extended to 48 hours with the consent of the works council. The employers were negotiating on the subject on the occasion of the discussion of wages then in progress. Certain large printing works also work ordinarily only 46 hours per week. The two shift system is occasionally found in printing works. At Stuttgart, for example, all pressmen and compositors work regularly in two shifts. At Cologne this holds good for machine compositors, but is exceptional among pressmen and machine minders. On the other hand, in Berlin the two shift system is quite unusual, and the three shift system was never found in a printing works, and the two shift system only in a single book-binding firm. In book binding the two shift system appears to be altogether exceptional. During the last few months overtime has been frequent in printing and book binding.

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<sup>(10)</sup> The classification of industries here followed is that adopted in the industrial statistics of the Netherlands.

At Leipzig ten hours' overtime a week was worked in a large number of printing works. Certain large book-binding works, which usually work five days of 8 hours and one of 6, making a working week of 46 hours, have for four or six weeks been working five days of 9 hours and two of 6, making a working week of 57 hours, of which 6 are worked on Sunday. These extensions are justified by the accumulation of work owing to the Christmas season, which coincided with a large volume of foreign orders. The workers are in favour of overtime, since they experienced a great deal of unemployment during the first three quarters of 1921. They also prefer Sunday work to longer hours on week-days, since Sunday work is better paid and they are fresher on that day, thus earning relatively more, particularly on piece work. During the last few months some printing works at Cologne have worked ten hours' overtime per week, in each case for several consecutive weeks. At Stuttgart there was scarcely any overtime in printing works. Manufacturers of account books and office stationery have been working five to ten hours' overtime per week for the last fortnight.

### *Chemical Industry*

Although the German Order authorises a working week of 56 hours in continuous processes which have to be carried on on Sunday, very many chemical works have introduced the 48-hour week. In these cases the three shift system is used, supplemented by additional workers. This is the case in the great chemical trades of Frankfort-on-Main and Höchst, of Zevenkusen near Cologne, and in the chemical factories of Elberfeld-Barmen. The same system is adopted in municipal undertakings, such as gas works, water works, etc. In the cement industry also 48 hours is the maximum. Among the larger establishments which have adopted the 56-hour week is the Leuna Works at Merseburg.

### *Wood Working Industry*

Throughout the wood working industry, including furniture factories, saw and planing mills, custom saw and planing works, and parquet-flooring works, the working week is fixed by the national collective agreement at 46 hours in first and second class districts, at 47 hours in third and fourth class districts, and at 48 hours in fifth and sixth class districts. The large towns are all included in the two first classes, districts of moderate importance in the third and fourth classes, and only villages and country districts in the fifth and sixth. Königsberg, where the working week is 48 hours, is an exception. This general collective agreement remains in force until 15 February 1923. Under its provisions, overtime for more than a week is only permissible under a ruling of the adjustment board, and only in cases where it is impossible to carry out the work by engaging a larger number of workers. In practice, overtime is not worked in Berlin, only

to a small extent in Saxony, but more generally in Nuremburg-Fürth and Höchst near Frankfurt. A certain number of furniture and mirror factories have been working 5 to 10 hours' overtime per week for several weeks. In the Rhineland carpentry works generally work 5 to 8 hours' overtime per week, in each case for several consecutive weeks.

In heavy wood sawmills the working week is generally limited to 48 hours. Piano factories at Berlin, Dresden, and Meissen work 46 hours per week. Broom, brush and pencil factories work 46 hours per week in the large towns, 47 hours in districts of moderate importance, such as Bamberg and Bayreuth, and 48 hours in small districts. The collective agreement is valid for an indefinite period, but may be cancelled on three months' notice. Some of the workers in the Nuremburg pencil factory work overtime.

### *Clothing Industry*

Under collective agreement the working week in this industry is 48 hours, but in some towns it is only 46 hours. For the last three months, overtime of from 3 to 6 hours per week has been worked fairly frequently, but less in Berlin than in other towns.

### *Leather Industry*

The working week in tanneries is fixed by collective agreement at 48 hours; in boot and shoe factories at 47; in leather glove and morocco-dressing works, as well as throughout the rubber industry, at 48 hours. A few departments in certain boot and shoe factories at Stuttgart work three or four hours' overtime.

### *Metal Working Industry*

The normal working week in this industry ranges from 44 to 48 hours. The national collective agreement fixes the working week at 48 hours, if a shorter period has not been fixed by local agreement. These local agreements may provide for a working week of 46½ hours, as at Berlin; 46 hours, as in Saxony (except in the country), in Bavaria (i. e. Munich, Augsburg, Nuremberg, and Fürth), and in Wurtemberg; or 48 hours, as in the naval shipyards of the Baltic and North Sea coasts and in the Rhineland and Westphalia, which cover the whole Ruhr basin. There are some large factories, however, where the working week is shorter than the maximum so laid down. At Nuremberg, for example, the large engineering works work only 45 hours per week. The two shift system is adopted wherever necessary, if the workers required are forthcoming. It is most frequently found in the naval shipyards of the Baltic and North Sea coasts. The three shift system is quite exceptional.

Overtime practically does not occur in the naval shipyards on the Baltic and North Sea coasts and at Berlin. The same holds

good of the large engineering works of Saxony, Bavaria, and Württemberg. On the other hand, some bicycle, type-writer, and nickel ware factories work 5 to 8 hours' overtime per week in certain departments. In the Ruhr district and in other parts of Prussia, for example Halle, a great many factories have been working 5 to 10 hours' overtime per week for some months. Certain other exceptions to the normal working week may be mentioned. When the assembling of parts is done outside the factory, as is especially the case in the manufacture of heating apparatus, the 48-hour limit is exceeded and 10 hours is the usual working day. Blacksmiths in the agricultural district are allowed to work 10 hours a day in summer and 9 hours in spring and autumn.

### *Textiles*

Throughout the German textile industry the working week is fixed by collective agreement at 46 hours, but places in the occupied area on the left bank of the Rhine, such as München-Gladbach and Crefeld, are excepted, where the 48-hour week is applied. The national agreement fixing the weekly limit at 46 hours was denounced by the employers, but the various district agreements, which have been renewed up to the present, still maintain this limit. The woollen industry in Lusatia is governed by an agreement valid up till 31 December 1922. In the Elberfeld-Barmen district the agreement expired on 1 January 1922, but was renewed for six months. Similarly in the important textile industry of Saxony the working week has for a long time been limited to 46 hours. It appears that in Lusatia overtime, which is worked in several factories, was limited to 5 or 10 hours per week, and that this only occurred for a few weeks in the year.

The two shift system is found particularly in certain spinning mills. At Chemnitz overtime is more frequent; for two or three months 5 or 6 hours have been worked regularly. In lace, braid, and artificial silk works at Elberfeld-Barmen the two and three shift systems are in force, but women work on the two shift system only. In ribbon and weaving mills the two shift system is exceptional, and 5 hours' overtime per week has been worked in this branch of industry for several weeks. At München-Gladbach the normal working week is about half an hour or an hour shorter than the maximum of 48 hours laid down by collective agreement. For the last two or three months 5 or 6 hours' overtime has been worked.

### *Beet Sugar Mills*

Under a Ministerial Circular the two shift system, in place of three shifts, may be authorised in individual cases in sugar mills during the beet harvest, provided that the 12 hours' Sunday rest prescribed in Section 105 (d) of the Industrial Code is observed. Thus the workers have an outside working week of about 78 hours. This exception is justified on the ground of the shortage

of workers and the difficulty of finding housing accommodation during harvest time for a larger number of workers. No very general use, however, is made of this exception. In Brunswick and in some of the sugar mills of the Prussian province of Saxony two shifts of 12 hours each are employed. In Hanover and the old kingdom of Saxony, on the other hand, three shifts of 8 hours are more general. It has moreover been intimated that this is the last time that such exceptions will be permitted. In sugar refineries the three shift system is in force.

### *Bakeries*

Night work in bakeries between 10 p. m. and 6 a. m. is prohibited under a special Order. One hour's work on Sunday is allowed between 6 p. m. and 10 p. m. for purposes of preparatory work, and no other exceptions for preparatory work are allowed. Hitherto no use has been made of the clause by which the governor of a district may put back the period from 10 p. m. to 6 a. m. by one hour so that work may begin at 5 p. m. instead of 6, but the master bakers of Westphalia and the Rhineland have put forward a collective request for the application of this clause. The effects of the prohibition of night work vary considerably from one district to another according to the relative importance of large or small-scale undertakings, house-to-house delivery, and the effect still produced by the bread rationing system. Large-scale bakers fear an unfavourable reaction, which has already appeared to some extent. Small-scale bakers do not observe the law.

### § 4. CONCLUSIONS

The Commission feel that they may draw the following conclusions as a result of their enquiry into hours of work in Germany.

(1) With certain exceptions, which are met with in the same degree in the Netherlands, the normal working week per worker, which determines the importance of the wage bill in total cost of production, does not exceed 48 hours, being thus at the outside 3 hours longer than that in force in the Netherlands. In certain important industries, however, these hours have been reduced by collective agreement by an amount varying from 1½ to 3 hours. Thus the working week in the wood working industry is only 46 hours in the large towns; in the metal working industry at Berlin it is 46½ hours; in Saxony and southern Germany it is 46 hours; while in the textile industry, with the exception of the Occupied area, it is also 46 hours. Most of the metal working industry and the whole textile industry thus work 1½ to 2 hours less than in the Netherlands under the provisional regulations in force up to 24 October 1922 <sup>(11)</sup>.

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<sup>(11)</sup> Paragraph 1 of these provisional regulations provides that up to the date given above 48 hours instead of 45 per week may be worked in the metal and textile industries.

(2) The total number of hours worked per week (man-hours) which determines the proportion of labour costs to total costs of production, is in certain German industries twice and in some cases even three times as high as in the Netherlands, owing to the fact that the two and three shift systems are subject to no restriction in Germany and are not even opposed by the workers.

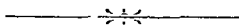
(3) During the last quarter of 1921, owing to a rush of orders both at home and from abroad due to the sudden fall in the mark, industrial activity increased considerably, thereby reducing unemployment and forcing certain industries to work 5 to 10 hours' overtime per week more or less regularly. The general opinion in Germany is, however, that this overtime will disappear automatically as industrial activity decreases.

(4) In view of the present industrial situation, as a general rule no authorisation of overtime is granted in order to reduce cost of production, nor for the purpose of achieving indirectly a reduction of time wages.

(5) When it is possible, without interfering with the principle of the 8-hour day, to assist the working of an undertaking to any considerable extent by instituting a limited amount of overtime, this is usually done in Germany with the consent of the works council alone, without applying for the approval of the authorities, although this is technically necessary.

In practice German legislation affords heads of undertakings more freedom than the Dutch Act without appreciably affecting the reduction of working hours. It should, however, be noted that in Germany the statutory representation of the workers in each establishment by a works council forms a guarantee against abuse. Such statutory representation does not exist in the Netherlands. In Germany, the influence of the trade union movement in matters connected with overtime is also greater than in the Netherlands.

(6) The administrative procedure laid down by the German Order on hours of work is simpler, and under the new Bill, if adopted, will remain simpler, than that required in the Netherlands.



# MIGRATION

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## Notes on Migration

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**T**HE statistical section of these notes includes a summary of a French report on international migration during the twentieth century. Notes are also given on the employment of British ex-Service men in the Dominions, and the relative numbers of British and foreign seamen on board British ships. Among migratory movements in 1921 noted are those from Italy to Brazil, and general emigration from Austria, Spain, the Netherlands, Poland, and Sweden. The general statistics of emigration from Spain during the twentieth century are analysed, and figures given of the amount of money sent home by Spanish immigrants in South American States. Figures are also given of immigration and naturalisation in the United States, as well as the volume of emigration to the Brazilian State of Sao Paulo.

Under "Government Policy and Legislation" notes are given on the development of immigration policy in Australia, the objects and main features of Italian emigration policy, the extension of benefits under Swedish social insurance legislation to Italians living in Sweden, the conditions of the issue of unemployment relief to foreigners in Belgium, a Bill on the embarkation of stowaways in France, reorganisation of the Emigration and Colonisation Departments in Spain, restrictions on immigration in Panama, and recent development in immigration policy in the United States.

In connection with the question of collective recruiting of labour, the action of the Italian Emigration Department and the conditions of engagement of Czechoslovak workers for employment in Germany may be noted. The last section of these notes, that on welfare institutions, deals with the attitude of the British Labour Party to the work of the Overseas Settlement Committee, the organisation of education for Italian emigrants, and Swiss welfare and benevolent associations abroad, with the support given them from the home country.

### MIGRATION MOVEMENTS

#### *International Statistics*

A statistical report on the volume of international migrations between 1901 and 1920 has recently been published in the *Bulletin de la Statistique Générale de la France* for October 1921. This report carries on the

tables of international emigration which were published before the war by the Italian General Emigration Department. It is pointed out that the terms "emigrant" and "immigrant" are very variously interpreted in different countries. In one country they may cover all travellers; in another, all those who arrive or leave by sea; in others again, all third-class or steerage passengers. The terms are applied to those leaving either for an overseas or an overland destination, and sometimes to both classes. In other cases, the classification is made according to arrival or departure under given conditions, or from or to certain countries only. Sometimes emigrants in transit are included and sometimes excluded. As a result of all these variations, the statistics included in this report can hardly be used as a basis of comparison of migratory movements in different countries; but as they have generally been drawn up for the whole of the period covered, i. e. from 1901 to 1920, on a uniform principle within each country, and in view of the fact that they are the only statistics of this kind in existence, the reproduction of the general table of emigration and immigration between the countries dealt with will be of interest, although no critical analysis is possible. Readers of these tables should be warned against drawing too hasty conclusions, and are advised to refer to the original article in order to verify the exact significance in any given case of the words "emigrant" and "immigrant". It may be noted that in the majority of cases these statistics only apply to overseas emigrants, and that for European countries the word "immigration", as in overseas countries the word "emigration", applies mainly to repatriated nationals returning to their own country after living for some time overseas.

## TOTAL NUMBER OF EMIGRANTS (IN 1,000's) FROM 1901 TO 1920

Country	1920	1919	1918	1917	1916	1915	1914	1913	Average of the years			
									1910-1912	1907-1909	1904-1906	1901-1903
<b>Europe</b>												
Great Britain and Ireland	284.8	146.9	10.6	10.0	52.9	76.9	214.9	389.4	327.0	—	—	—
Denmark	6.3	3.3	0.8	1.6	4.3	3.3	6.2	8.8	8.6	6.4	8.5	6.6
Norway	5.6	2.4	1.2	2.5	5.2	4.6	8.5	9.9	13.5	15.6	22.0	19.9
Sweden	10.2	7.3	4.9	6.4	10.6	7.3	13.0	20.3	22.0	19.2	23.8	33.7
Finland	—	1.1	1.9	2.8	5.3	4.0	6.5	20.0	13.0	13.7	15.3	17.6
Austria	—	—	—	—	—	—	—	194.5	126.7	118.3	113.2	87.0
Hungary	—	—	—	—	—	—	92.4	96.7	88.4	119.8	135.2	62.7
Switzerland	9.3	3.1	0.3	0.7	1.5	2.0	3.9	6.2	5.6	4.8	5.1	4.8
Germany	8.5	—	—	—	—	—	11.8	25.8	22.2	25.5	29.1	30.2
Holland	—	2.4	1.2	0.9	0.9	1.1	2.2	2.3	2.7	3.4	2.4	2.1
Belgium	—	38.4	—	—	—	—	—	22.3	19.8	18.3	15.7	12.2
Portugal	—	—	—	15.8	24.9	19.3	25.7	77.6	62.7	40.1	33.2	22.0
Spain	—	102.0	36.2	66.0	100.3	96.4	129.6	220.4	208.1	144.1	113.4	55.2
Italy	364.9	—	28.3	46.5	142.3	146.0	479.2	872.6	632.2	605.7	661.8	524.2
<b>Outside Europe (repatriated)</b>												
United States	288.3	123.5	94.6	66.3	129.8	204.1	303.3	308.2	277.1	310.5	—	—
Cuba	—	32.7	31.8	29.3	15.1	29.0	23.6	19.3	20.4	19.2	18.2	—
Argentina	—	42.3	24.1	51.0	73.3	111.5	178.7	156.8	112.9	90.1	49.0	—
Uruguay	—	6.0	4.0	4.0	5.0	6.9	11.6	12.4	8.7	6.7	5.9	—
Australia	89.8	61.4	35.7	40.6	53.2	66.3	93.9	77.0	65.3	56.8	47.6	65.6
New Zealand	32.9	19.9	11.6	13.9	21.2	22.5	32.5	30.4	35.1	31.7	24.0	20.2



TOTAL NUMBER OF IMMIGRANTS (IN 1,000'S) FROM 1901 TO 1920

Country	1920	1919	1918	1917	1916	1915	1914	1913	Average for the years			
									1910-1912	1907-1909	1904-1906	1901-1903
Europe												
Great Britain and Ireland	86.0	93.0	8.8	12.3	57.9	92.0	104.5	85.7	59.7	—	—	—
Sweden	10.8	7.8	4.9	5.8	6.7	6.4	8.6	8.4	8.1	8.9	9.2	7.3
Finland	—	0.7	0.14	0.7	0.22	0.5	1.8	2.1	2.1	2.8	1.6	1.2
Hungary	—	—	—	—	—	—	30.8	31.8	38.6	54.0	—	—
Belgium	19.9	—	—	—	—	—	—	9.4	10.2	9.1	8.5	8.4
Spain	—	85.0	51.1	71.2	96.5	111.5	192.1	147.7	109.4	86.6	64.6	55.4
Outside Europe												
Canada	—	57.7	79.1	75.4	48.5	144.8	384.9	402.4	294.4	178.0	153.2	—
United States	430.0	441.1	440.6	295.4	298.8	326.7	1218.5	1197.9	919.4	910.0	980.0	664.6
Cuba	—	80.5	37.3	57.1	55.1	32.8	25.9	43.5	38.1	30.6	44.4	—
Brazil	—	—	—	—	—	—	—	192.7	134.9	82.6	63.3	57.0
Argentina	—	69.9	50.7	51.7	82.4	82.7	182.7	361.3	335.3	279.7	228.3	111.6
Uruguay	—	11.3	—	4.4	4.7	5.6	40.5	16.6	14.4	8.9	7.8	—
Union of South Africa	—	—	6.6	6.9	13.1	17.5	31.0	39.8	48.8	29.2	40.0	—
Australia	97.6	59.2	34.8	36.6	47.4	63.0	110.5	141.9	134.9	74.8	49.7	61.8
New Zealand	44.0	20.9	11.9	15.6	21.8	25.6	37.6	44.6	41.3	33.9	34.8	28.7

In the tables drawn up for each country, the authors of the report have attempted to indicate sex, age, country of origin and of destination, and profession of emigrants, but the figures published are too scattered and incomplete to make tables for international comparison possible. At the end of the report, attention is drawn to the great decrease in movements of population between Europe and overseas countries since the war. Figures of immigration into Canada, the United States, Cuba, the Argentine, and Australia have fallen from an average of 1,771,400 for the years from 1910-1913, to 463,100 for the years 1915-1918, a decrease of 73.8 per cent. In ten countries of emigration, namely, Great Britain, Denmark, Norway, Sweden, Finland, Switzerland, the Netherlands, Portugal, Spain, and Italy, the number of emigrants fell from an average of 1,485,800 for 1910-1913, to 259,200 for the years 1915-1918, a drop of 82.6 per cent. In many countries the current of migration has been reversed. Thus, Australia and the Argentine have become countries of emigration, while Great Britain, the Netherlands, and Spain have become countries of overseas immigration, or repatriation.

The proportion of women among emigrants and immigrants has in almost all countries been greater during the war period than in time of peace. In Norway, Sweden, Portugal, and the Netherlands, the proportion of women was equal to or greater than that of men among emigrants. There has also been an increase in child emigration. The figures regarding occupation are far from clear, but seem to indicate that emigration among agricultural workers decreased during the war.

### Great Britain

The Oversea Employment Branch of the Ministry of Labour, which works in co-operation with the London representatives of the Dominions and with the Oversea Settlement Office, registers all vacancies and all applicants for employment overseas. This information is circulated to all employment exchanges, where applicants may obtain all available information and where they are personally interviewed by

local committees. During 1921 <sup>(1)</sup> opportunities for employment overseas were mainly limited to ex-Service men, the principal demand being from Australia, where large numbers of men were required for employment on the land. The number of vacancies actually filled during the year, in upwards of fifty occupations, was as follows :

Country	Men	Women	Total
France	688	—	688
Australia	388	10	398
South Africa	115	6	121
Canada	45	47	92
New Zealand	29	8	37
Other countries	7	11	18
Total	1,272	82	1,354

Grants for oversea settlement were paid from the National Relief Fund and from the Treasury Grants Fund. The conditions for obtaining an advance from the National Relief Fund were that the applicant was suffering hardship arising out of the war and that he was approved by the government of the territory to which he desired to go. The sum of £44,885 was distributed through the employment exchanges under this scheme to 3,447 persons, of which 1,528 were men, 724 women, and 1,195 children. The condition of obtaining assistance from the Treasury grant was that it must directly or indirectly relieve unemployment in the United Kingdom. £8,547 was distributed in this way to 1,179 persons of which 599 were men, 230 women, and 350 children.

According to a statement by the Secretary of State for the Colonies the number of persons to whom free passages have been granted under the Government settlement scheme in the Dominions up to the end of February 1922 is approximately 71,300. A statement was also made in the House of Commons by Mr. Amery on behalf of the Secretary of State for the Colonies to the effect that only a few of those who proceed overseas have either the experience or the capital necessary to enable them to obtain grants of land immediately on arrival overseas. A certain number have been settled on the land in Canada under the Canadian Soldiers' Settlement Scheme, but selections under this scheme, though at one time made in this country by a special commission of the Canadian Government, have for some time past only been made in Canada, and no exact figures either as to numbers or acreage are available. Similarly, in the case of the other Dominions, while a few have proceeded direct to holdings already arranged for them, others, of whom no exact records are available, have been able to establish themselves on the land subsequent to their arrival.

Among the questions most in dispute concerning equality of treatment for national and foreign workers is that relating to the hiring of foreign seamen for service on board ship and their conditions of work, especially with regard to the employment of coloured seamen. The British Government has just issued an interesting table on this matter showing the number of British subjects, foreigners other than Asiatics and Africans, Chinese, Asiatics (other than Chinese) and Africans employed since 1906 on board British ships.

The figures reprinted below show the number of engagements which took place, but not the number of seamen employed, as a seamen may have served on more than one ship during the year, and each time that

<sup>(1)</sup> *Labour Gazette*, London, Feb. 1922.

he signed an agreement is counted as an engagement. On the other hand, the engagement of any seaman who signed articles in any year and whose engagement did not terminate during the following year would not be included in the number of engagements for that following year. Similarly engagements of seamen for British ships at foreign ports are not included.

Year	British		Foreigners other than Asiatics and Africans		Chinese		Asiatics (other than Chinese) and Africans		Total
	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.	
1906 <sup>(1)</sup>	359,284	85.98	50,512	12.08	3,190	0.78	4,874	1.16	417,860
1907 <sup>(1)</sup>	371,723	86.86	46,054	10.76	4,952	1.16	5,219	1.22	427,948
1908 <sup>(1)</sup>	364,351	87.84	39,840	9.61	4,463	1.07	6,117	1.48	414,771
1909 <sup>(1)</sup>	363,031	88.31	37,727	9.18	5,442	1.32	4,898	1.19	411,098
1910 <sup>(1)</sup>	379,077	88.95	36,702	8.61	5,623	1.32	4,802	1.12	495,054
1911	503,689	90.51	42,316	7.60	5,366	0.96	5,122	0.93	556,493
1912	514,032	90.04	43,878	7.68	7,450	1.30	5,556	0.98	570,916
1913	541,830	89.59	47,269	7.81	9,286	1.53	6,475	1.07	604,830
1914	500,423	89.0	46,116	8.1	8,182	1.5	7,546	1.4	562,267
1915	384,602	83.2	55,269	11.7	14,224	3.2	8,614	1.9	462,709
1916	348,432	83.83	44,634	10.74	11,593	2.79	11,953	2.64	415,617
1917	305,567	82.92	38,761	10.52	11,321	3.07	12,863	3.49	368,512
1918	312,357	86.72	25,506	7.08	10,784	2.99	11,535	3.2	360,182
1919	383,066	91.0	21,353	5.0	5,459	1.3	11,142	2.6	424,020
1920	455,291	93.49	15,969	3.3	3,624	0.74	12,093	2.47	486,977
1921	398,993	94.45	12,906	3.05	2,529	0.60	8,017	1.90	422,445

<sup>(1)</sup> These figures are for the 48 principal Mercantile Marine Offices only.

### Italy

The signing of the agreement between Italy and Brazil on migration and labour <sup>(2)</sup> has been made the occasion of the publication in the *Bulletin* of the National Agricultural Society of Rio de Janeiro of statistics on Italian immigration in Brazil, which has been of great importance in the agricultural development of the country <sup>(3)</sup>. These figures go back as far as 1902, when 23,479 Italians entered Brazil. From that date, the numbers fell steadily up to 1911, being as follows :

Year	Number	Year	Number
1903	10,515	1908	9,595
1904	9,869	1909	9,295
1905	14,297	1910	8,434
1906	12,413	1911	18,011
1907	11,836		

The 1902 figure was exceeded for the first time in 1912, when the number of Italian immigrants reached 23,488, but since then it has fallen steadily from 9,162 in 1914 to 2,575 in 1915, 1,212 in 1916, 151 in 1917 and 118 in 1918, rising again to 4,135 in 1919, and 8,593 in 1920.

### Austria

The Emigration Office of the Austrian Government has recently published emigration statistics for 1921. The total number of oversea emigrants from Austria during this year was 5,176, of whom 2,779 were

<sup>(2)</sup> See p. 811.

<sup>(3)</sup> A *Lavoura*, Oct.-Nov. 1921, p. 250.

males and 2,397 females. Of this number, 3,623 persons emigrated alone, and the remainder, 1,553, belonged to 497 households which emigrated together. Adults numbered 3,320, minors 1,856. A very limited number of these emigrants, namely 121, travelled at their own expense. Of the total number of emigrants, 4,157 went to the United States, 649 to Brazil, 198 to the Argentine, 73 to the Dutch Indies, and 99 to other countries. The majority of them were town dwellers, 1,982 coming from Vienna, 1,873 from the Burgenland, and 1,317 from other provinces.

Agricultural workers were not in such a heavy majority as usual. The classification by occupations shows that 915 emigrants were employed in agriculture, forestry, and horticulture, while 675 were domestic servants, 296 commercial employees, 272 labourers (*Hilfsarbeiter*), 265 building workers, 252 clothing and cleaning workers, 146 civil servants, 625 manual workers of other categories, while 89 were non-manual workers in transport and the hotel trades, and 67 belonged to the liberal professions (for example, doctors, teachers, officers, and artists). In 676 cases, no occupation was given, or the emigrant was stated to have no occupation, while 898 were members of emigrant's families.

The number of applications to the Information Office with regard to emigration rose to 9,747 for oversea emigration, while 4,880 applications were made with a view to emigration to other European countries, especially Roumania, with 1,451 applications; Bulgaria, with 720; and the Netherlands, with 600.

### *Spain*

The Superior Emigration Council has recently published statistics which show that during the year 1921 62,527 persons emigrated, this number being 85,391 less than in the previous year. The largest number (20,171) went from the port of Vigo, the smallest (1,676) from Villagarcia. Among countries of immigration the Argentine received the largest number of Spanish immigrants. The number of persons repatriated was 71,966, that is to say, 9,349 more than the number of persons emigrating.

To supplement this information, certain figures may be quoted from an interesting report on Spanish emigration from 1901 to 1918 (\*). According to the statistics of the movements of travellers by sea published by the Geographical and Statistical Institute of Spain, the total number of travellers who left Spain by sea between 1901 and 1918 is 2,225,000. Three distinct periods may be noted. From 1901 to 1904 the movement was small and limited, averaging 63,263 persons per year; from 1905 to 1913, emigration increased rapidly, reaching an average of 170,000 persons per year; from 1914 to 1918, the average fell again to 85,724, but this decrease is counterbalanced by a considerable increase in overland emigration. According to the investigations of the Institute of Social Reform into overland emigration of workers, from 1916 to the end of the first quarter of 1918 roughly 220,000 Spaniards entered France, making an average of 97,000 per year. If the figures for oversea and overland emigrants are added, the yearly average is higher for this period than for the preceding one.

The number of oversea travellers, however, only gives a rough idea of the total number of emigrants. From one point of view, it is too small, for a great many Spanish travellers embark in France, in Portugal, and at Gibraltar, and corresponding statistics drawn up in the

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(\*) *El Sol*, 22 Feb. 1922. Madrid.

Argentina, Brazil, and Uruguay show that the number of Spaniards who embarked at ports outside Spain is equal to 47 per cent. of the number embarking in Spain. On the other hand, comparison between the figures published by the Geographical and Statistical Institute and those of the Superior Council of Emigration shows that, of 870,000 travellers who embarked between 1912 and 1917, only 568,000 or 65 per cent. were real emigrants. Those who leave Spain are not always permanent emigrants. Of 1,530,000 persons who sailed between 1905 and 1913, the great majority (871,000) returned to the country during this period. It is stated that 70 per cent. of the emigrants were agricultural labourers, 70 per cent. males, and 66 per cent. adults.

Spaniards who emigrated to the various states of South America sent home money during 1920 to an extent which may be judged from the following figures :

Country	Number of consignments	Total value in pesetas
Argentina	47,000	216,573,000
Chili	12,476	24,225,000
Brazil	12,595	22,216,000
Uruguay	718	8,234,000
Peru	817	8,483,000

Adding to these the sums sent home from other South American republics, it may be estimated that about 800,000,000 pesetas were sent to Spain in this way. These did not constitute a commercial turnover, but were for the most part actual savings sent by emigrant Spaniards to their families.

#### *Netherlands*

Oversea emigration from the Netherlands passes through the ports of Amsterdam and Rotterdam. In 1921 emigrants sailing from these ports included 3,273 Dutch subjects, of whom 1,546 were men, 1,155 women, and 572 children under 10. Foreign subjects going direct to their destination numbered 25,717, and persons of all nationalities travelling to an intermediate destination 6,990. The majority, i.e. 3,031, of emigrants of Dutch nationality were going to the United States, the remainder to Canada, Argentina, Brazil, and other countries. The 25,717 foreigners sailing from Dutch ports included 6,339 Poles, 4,107 Czechoslovaks, 553 Germans, 1,931 Hungarians, and 1,038 Roumanians.

The effect of the restrictive legislation of the United States has been to decrease the volume of emigration from Holland considerably. The number of Dutch and foreign emigrants travelling direct to their destination fell from 1,153 and 11,955 respectively in the first quarter of 1921 to 1,095 and 7,597 in the second quarter, 622 and 3,892 in the third quarter, and 403 and 3,273 in the last quarter. These figures, which are only provisional, are taken from the official quarterly statistics.

Two series of figures issued in the Netherlands give further information regarding international emigration movements. The first gives the number of certificates of nationality issued by the Netherlands Government to those of its nationals who wished to reside abroad. These figures were as follows :

Year	Number	Year	Number
1905	20,658	1914	19,081
1906	30,385	1915	7,402
1907	49,018	1916	3,913
1908	32,496	1917	5,121
1909	26,826	1918	4,714
1910	30,364	1919	2,974
1911	33,606	1920	2,461
1912	34,248	1921	2,753
1913	25,128		

This steady decrease in the number of certificates of nationality issued, which has sometimes been taken as an index of the number of emigrants, is attributed by the Netherlands Government to the increased use of passports, which have gradually been substituted for certificates of nationality and are now legally required in most countries, especially in Germany. The number of passports issued for foreign travel, which before the war was negligible, was as follows :

Year	Number	Year	Number
1915	83,070	1919	151,961
1916	53,721	1920	165,880
1917	55,852	1921	230,884
1918	78,157		

### *Poland*

According to information received by the Central Emigration Office of the Polish Ministry of Labour and Social Relief, passports were issued between January and June 1921 to 79,595 emigrants. The great majority of these, 62,362, were Jews, and only 17,233 Christians. Sex and age classification gave 26,005 or 32.7 per cent. as men, 36,344 or 45.7 per cent. as women, and 17,246 or 21.7 per cent. as children. More than two-thirds of the emigrants, i. e., 69,033, were going to the United States ; 4,757 to Palestine ; 3,833 to Canada ; 510 to Argentine ; 114 to Brazil ; and 1,348 to other countries.

### *Sweden* <sup>(5)</sup>

From a summary of figures for 1921 made by the Social Board, it appears that emigration decreased considerably during that year. The total number of oversea emigrants was 5,062, as against 6,078 in the previous year, 3,499 in 1919, 1,111 in 1918, and 2,537 in 1917. The following table will give an idea of the distribution of emigrants of certain age groups during 1921 :

	Men		Women		Total	
	Absolute figures	Per cent.	Absolute figures	Per cent.	Absolute figures	Per cent.
Under 15 years	251	10.1	260	10.1	511	10.1
15 to 19	771	31.0	601	23.4	1,372	27.1
20 » 29	914	36.7	971	37.7	1,885	37.2
30 » 39	314	12.6	413	16.0	727	14.4
40 » 49	123	5.0	146	5.7	269	5.3
50 years and over	115	4.6	183	7.1	298	5.9
Total	2,488	100.0	2,574	100.0	5,062	100.0

### *United States*

The number of immigrants admitted to the United States in the year ending 30 June 1921 has already been given in these *Notes* <sup>(6)</sup>. Additional figures are, however, available now in the report of the

<sup>(5)</sup> *Sociala Meddelanden*, No. 3, 1922.

<sup>(6)</sup> *International Labour Review*, Vol. V, No. 1, Jan. 1922, p. 113.

Secretary of Labour (7). Immigration in 1920-1921 approached the pre-war figures, as may be seen from the following table, which shows the total movement of aliens, whether classed as migrants or not, in the United States.

Year (1)	Arrivals	Departures	Excess of immigration
1911	1,030,300	518,215	512,085
1912	1,017,155	615,292	401,863
1913	1,427,227	611,924	815,303
1914	1,403,081	633,805	769,276
1915	434,244	384,174	50,070
1916	366,748	240,807	125,941 (2)
1917	362,877	146,379	216,498 (2)
1918	211,853	193,268	18,585
1919	237,021	216,231	20,790
1920	621,576	428,062	193,514
1921	978,163	426,031	552,132

(1) Year ending 30 June.

(2) This large increase is explained by the relaxation of restrictions during the war, whereby the entry of agricultural labourers, particularly from Mexico, was made easier.

The next two tables show the country from which most of the immigrants came, and the race or people to which they belonged, a comparison being made with the previous year.

Country	1921 (1)	1920 (1)	Country	1921 (1)	1920 (1)
Italy	222,260	95,145	Mexico	30,758	52,361
United Kingdom	79,577	48,062	Scandinavia	22,854	13,444
Greece	28,502	11,981	Portugal	19,195	15,472
Poland	95,089	4,813	Spain	23,818	18,821
Czechoslovakia	40,884	3,426	China	4,009	2,330
British N. America	72,317	90,025	Japan	7,878	9,432

(1) Year ending 30 June.

Races or peoples	1921	1920
Italians (North and South)	222,496	97,800
English	54,627	58,366
Hebrew	119,036	14,292
Irish	39,056	20,784
Scandinavian	25,812	16,621
Scotch	24,649	21,180
Spanish	27,448	23,594

The number of immigrants admitted from Canada and Mexico was rather less than in 1919-1920, owing in the case of Mexico to more or less depressed industrial conditions in the southern States, and in the case of Canada to the high rate of currency exchange, the advances in

(7) *Ninth Annual Report of the Secretary of Labour for the fiscal year ending 30 June 1921*. Washington, Government Printing Office. 1921.

railway rates, and general economic conditions and wage rates "not materially lower than that which prevails in the United States". The special war-time regulations, under which the illiteracy, contract labour, and head tax conditions were temporarily relaxed in favour of agricultural labour from Mexico, were rescinded on 2 March 1921. Under these regulations 72,862 aliens were admitted from 1917 to 1921. On 30 June 1921 34,922 of these had returned to Mexico, 414 died, 494 have since been admitted as permanent residents, 21,400 deserted, and 15,632 were still with their original employers who brought them in.

With regard to Oriental immigration, 4,017 Chinese were admitted, as compared with 2,148 in the previous year. A considerable number of Chinese also succeeded in entering the country by deserting from vessels on which they were serving, entering surreptitiously across the land borders, or being smuggled in at various remote places. A plan for preventing these desertions of Chinese seamen is being devised. There were also admitted in transit 17,907 Chinese. The number of Japanese admitted was 10,675, as compared with 12,868 in 1919-1920, while 3,599 went to Hawaii as compared with 3,306 in 1919-1920.

It is stated that large numbers of Europeans have proceeded to either Canada or Mexico with the purpose of ultimately gaining surreptitious entry into the United States; hundreds of them have been arrested in the United States, and ordered to be deported. Deportations numbered 4,517 in the year under review as compared with 2,762 in the previous year. The deportees included:

1,268 Mexicans	179 French
389 English	139 Irish
380 Russians	138 Polish
341 Chinese	134 Hebrews
252 Germans	105 Scots
216 South Italians	

The Secretary of Labour states that conditions at Ellis Island are unsatisfactory (\*), but every effort is being made to make every immigration station a place of welcome. The facilities at Ellis Island are stated to be inadequate; a request was made to the budget officer for \$1,008,000 for improvements, and Congress was recommended to make an immediate appropriation of \$123,470.75 for this purpose.

During the year 1920-1921, 198,530 petitions for naturalisation and 304,481 declarations of intention were filed (°). Of the former, 17,636 were under the special law dealing with aliens who had performed military service. These figures show that 503,011 took either initial or final steps towards citizenship, as compared with 519,003 in 1919-1920. The decrease is due to the fact that the petitions under the special law relating to military service decreased by 34,336, the number of petitions under the general law being the largest since the organisation of federal supervision of the naturalisation laws.

The number of petitions actually dealt with by the courts during the year 1920-1921 was 228,120 (49,817 carried over from 1919-1920, 128,216 of the 198,530 referred to above, and 50,087 carried over from previous

(\*) *International Labour Review*, Vol. V, No. 4, April 1922, p 647.

(°) *Ninth Annual Report of the Secretary of Labour for the fiscal year ending 30 June 1921*. Washington, Government Printing Office. 1921.



years). Of these, 18,981 were dismissed, 45,483 were continued, and 163,656 were admitted. The reasons for dismissal were as follows :

Seeking to evade military duty by claiming alienage	1,736
Immoral character	719
Ignorance of American institutions	1,120
Persons who were citizens already	274
Under Section 2169 of Revised Statutes (only white persons and Africans may be naturalised)	20
Death of petitioner	533
Failure to comply with the law	14,579

With regard to citizenship training, the Department intends

To establish, in particular, a closer and more friendly relationship with the foreign-born population, toward their education in American laws, customs, and life, and for guarding them from views and doctrines of government repugnant to our Constitution.

### *Brazil*

The report of the Ministry for Agriculture in the State of Sao Paulo for the year 1920 states that 44,553 persons arrived in the State during the year. Of that number 32,848 arrived at the port of Santos and 12,069 came by railway. Of the former, 11,800 were Portuguese, 7,243 Spaniards, 5,476 Italians, 2,605 Brazilians from other States, 1,713 Turks, and 1,123 Germans. Of those who arrived by railway 10,094 were Brazilians. Of the 44,553, 36,493 were voluntary immigrants who paid their own expenses and 8,060 had their journey paid by the State. The number of passengers who left Santos travelling third class and therefore considered as emigrants was 16,478.

It is stated that although these figures are satisfactory they cannot be considered sufficiently large from the point of view of agricultural needs. Voluntary immigration forms only a very small proportion of the total number of immigrants who go on the land. Most of the voluntary immigrants take up various form of employment other than agriculture. The following table shows the number of voluntary immigrants who disembarked at Santos from 1908 to 1920 and who were sent to the hostel in the city of Sao Paulo.

Year	Immigrants disembarked	Immigrants sent to hostel
1908	29,515	6,869
1909	25,716	6,944
1910	23,229	5,292
1911	37,147	8,496
1912	55,908	11,784
1913	63,373	14,505
1914	31,906	9,855
1915	13,908	3,407
1916	11,086	2,890
1917	6,709	1,573
1918	5,340	605
1919	12,220	1,605
1920	24,460	3,030
Total	340,507	76,855

### GOVERNMENT POLICY AND LEGISLATION

#### *Land Settlement in Australia*

At the conference of State Premiers, held on 17 and 18 January, further steps were taken in the development of immigration policy <sup>(10)</sup>.

<sup>(10)</sup> *Argus*, Melbourne, 19 Jan. 1922.

Mr. Hughes, Prime Minister of the Commonwealth, stated at the close of the conference that some difficulties in the working of the existing scheme, which was based on the agreement of 1920, had been cleared up. These difficulties arose from the fact that the Commonwealth desired to maintain some control of the money advanced to the States for settlement purposes, and it was suggested that the developmental schemes should be under the control of special boards, on which the Commonwealth should have representation. The States objected to this course, on the ground that it was an unnecessary intrusion into the work of purely State administration. An alternative plan has therefore been adopted, by which specified proposals are to be submitted to the Commonwealth, which will approve them and obtain money for them on the loan market. All the States have now promised to submit schemes, and Western Australia has already done so. Some details of the West Australian scheme may be given here.

Land must be cleared in the wheat belt for present conditional purchase holders. Thousands of farms settled within the last twelve years need further development; 2,000,000 acres can be cleared. This is contract work, which can largely be done by the immigrant. The cost of this work (£3,000,000) may be spread over three years; the rate at which it is done depends on the number of men brought in. Wheat lands where cleared are cropped at once, and usually each year for the first four years without rest (fallow). This means a great deal of work in growing and handling crops. South-West development, including drainage, clearing, roadmaking, and railway construction, will require £1,000,000 per annum for three years. Provision of £2,000,000 per annum under these two heads will enable at least 25,000 men, women and children to be brought in.

The basis of the financial agreement between the Commonwealth and the State will be: (a) the State's responsibilities as described below; (b) the Commonwealth's responsibility to borrow money for the State's purposes. The Commonwealth will pay to the State half the cost for the first five years, to be retained by the State to cover any losses which may be sustained. Should the British Government at any time be induced to provide part of the cost, the amount so provided is to be deducted from the cost referred to before determination of the Commonwealth contributions. The State can guarantee that land will be provided when men prove suitable and experienced. It will definitely undertake to settle one immigrant for every £1,000 provided for any purpose. If money is provided now for advance to present settlers for further improvement or for railways, etc., the State undertakes to provide the funds necessary for farm making, when required, for the immigrant settler. This proposal is necessary, because work must be provided for the newcomer for at least twelve months. He cannot be settled on his own block without the experience gained by working for farmers.

The State definitely undertakes to place men on the land in the South-West in groups. Under the group settlement system the State will provide land free, except for office and survey fees (about £13). The area will vary from 50 to 160 acres, but will always be sufficient. Each group will consist of 20 farmers, working on a sustenance allowance, under a foreman, at the preparation of 20 farms, with house, water and the clearing and fencing necessary to bring the farm to the productive stage, where the farmer can live comfortably and pay his way. Stock and machinery will be provided. The cost of farm making, drainage, supervision, etc. will be charged to the land. Interest to date of taking possession will be capitalised. Men with small capital and experience

may select suitable areas for individual development where the clearing is not so heavy as to prevent development single-handed. Land is free as before up to 160 acres, and Agricultural Bank advances are available.

Queensland is putting forward a scheme for settling immigrants on cotton lands. Cotton growing, however, according to the Commonwealth Prime Minister, is not confined to Queensland. It could also be carried on in New South Wales. By an arrangement with the Empire Cotton-Growing Corporation a satisfactory guarantee of price has been secured, and it is hoped by the same means to ensure a good market for the product. The cotton crop lends itself to small settlements, and a quantity can be produced without outside labour sufficient to maintain a settler.

Some of the States are adopting an independent immigration policy. Thus in New South Wales a Bill has been introduced to enable unused or only partly used land within reasonable distance of existing railway lines to be opened up. According to the Minister for Agriculture <sup>(11)</sup>, this measure will ensure provision for the land-hungry people of the State and for desirable settlers from the Motherland, and will also be a giant stride towards the realisation of the ideal of a million farms for a million farmers.

The Agent-General for Victoria in London consulted the British emigration authorities in March about a scheme for the settlement of 10,000 British farmers in Victoria <sup>(12)</sup>. Under this scheme, which still requires parliamentary sanction in Victoria, the State Government proposes to raise £12,000,000 by loan in three annual instalments for the purpose of financing British settlers on 10,000 prepared irrigation farms of 15 to 20 acres each, up to a limit of £1,200 per man. These loans will be a charge on the farms, and will be repayable by instalments.

Mr. Hughes is reported <sup>(11)</sup> to have said, in a speech at Sydney on 25 January, that apart from Western Australia and Queensland he had abandoned any idea of reaching a general agreement with the States. The best thing he could do was to carry on with the co-operation of as many States as possible. He referred to the proposals <sup>(13)</sup> put forward for "peopling the Northern Territory with black labour", and said the idea was absurd.

#### *Emigration from Italy to Brazil*

The Brazilian Federal Government, according to the constitutional procedure of that country, has laid before Congress the agreement between Italy and Brazil on migration and labour, which was signed at Rome on 8 October 1921 <sup>(14)</sup>. The Italian Emigration Department has decided that in order to safeguard the application of this agreement, registration of workers for Brazil will be limited at first <sup>(15)</sup>. Registration will be open to regular family groups which include at least three skilled agricultural workers; individual registration is not allowed. The reason for this is that the work will be carried out in rural districts, away from populous centres, and an agricultural worker, finding himself isolated, might be inclined to leave the district and swell the ranks of the unemployed who drift only too easily into the chief centres of population in America. Families may include brothers and sisters, but not more distant relations.

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<sup>(11)</sup> *Argus*, Melbourne, 26 Jan. 1922.

<sup>(12)</sup> *Morning Post*, 13 Jan. 1922.

<sup>(13)</sup> *International Labour Review*, Vol. V, No. 3, Mar. 1922, p. 503.

<sup>(14)</sup> *International Labour Review*, Vol. V, No. 2, Feb. 1922, pp. 307 and 308.

<sup>(15)</sup> *Bollettino dell' Emigrazione*.

*Reciprocity between Italy and Sweden*

A Swedish Royal Decree dated 4 November 1921 stated that, as from 1 December 1921, Italian workers and their representatives would be placed on a footing of complete equality with Swedish nationals under the Accident Insurance Act. Hitherto the Swedish Act of 27 June 1916 on compulsory insurance against industrial accidents applied to foreign workers, but Section 27 stipulated that persons not Swedish citizens and not resident in the country, who were entitled to sickness gratuity or an annuity, were liable to have the payment reduced by from 20 to 50 per cent. of its capital value. In case of death, the funeral gratuity, annuities, or capital payments were only granted to those who were resident in the Kingdom at the time of the accident. The King was, however, authorised to make exceptions to this rule on condition that other countries accorded reciprocal treatment to Swedish nationals. As Italian accident legislation makes no distinction between Italian and foreign workers, the Emigration Department approached the Swedish Government in order to have this part of the Swedish Act applied. The Royal Decree mentioned above was issued for this purpose.

*Work of the Italian General Emigration Department*

In an interview with the *Mondo*, Mr. Giuseppe de Michelis, the Italian Commissioner-General of Emigration, described the work which his Department is undertaking, in order to ensure that the full economic, social, and intellectual value of emigration may be realised, as much in the interests of the emigrant labourer as in those of the community. Emigration, which at one time was a purely personal matter, has of late years become a mass movement and a matter of public concern. The Commissioner-General outlined the programme which his Department is undertaking to carry out as follows :

- (1) Industrial and educational preparation of the emigrant in his own country.
- (2) Investigation of the labour market abroad and the search for new openings for emigrant labour.
- (3) Moral and physical assistance and protection before departure, during the journey, and on arrival.
- (4) Finding of employment in countries of immigration and supervision of the enrolment of workers in Italy.
- (5) Taking all steps with a view to the institution of settlements and public works abroad and the establishment of labour co-operative societies.
- (6) International treaties and agreements with governments and labour contracts with individuals.

*Assistance to Foreign Unemployed Workers in Belgium*

The Belgian National Emergency Fund allows unemployed persons of foreign nationality to draw benefit on the same conditions as Belgian nationals, provided that they are resident in Belgium, and that similar privileges are accorded to Belgians in their country of origin. According to instructions sent by the Belgian Government to the unemployment societies which administer the emergency fund, five countries at present fulfil the conditions which entitle their nationals to benefit. In Great Britain, foreign nationals who are regularly insured against

unemployment have the same privileges as British subjects. In Denmark, foreign subjects have the same right as Danes to belong to recognised societies, and to receive unemployment benefit issued by them. The position of foreigners in the Netherlands is very similar. Unemployed Belgians in Austria enjoy the same privileges as those accorded to Austrian subjects under the Act of 24 March 1920, provided that Belgium gives reciprocal treatment to Austrian subjects resident in that country. In Poland also, provided the condition of reciprocity is observed, foreign workers may receive the same benefits as those provided for Polish citizens. The Belgian Government has, as yet, received no particulars or has only incomplete information regarding other countries. There are some countries in which the unemployment insurance system is so organised that nationals of that country are not allowed to receive the benefits granted in Belgium.

#### *Embarkation of Stowaways in France*

The French Government has recently introduced a Bill to prevent the embarkation of stowaways on board merchant ships. It is stated that under the Three per Cent. Act in the United States, the principal shipping companies have been informed that the quotas for Spain, Syria, and Persia, etc., for 1922 have been exhausted. In consequence, nationals of these countries who arrive in France with the intention of crossing to America make every possible attempt to get on board ship, even if this involves the payment of a considerable sum to accomplices. This situation does considerable harm to the shipping companies and, what is still more serious, threatens to compromise the public interest. Stowaways are almost always undesirable persons, and the government, which undertakes to guarantee safety on the railways, cannot remain indifferent to the safety of travellers on board ship.

The Bill contains only one clause. Its first paragraph states that stowaways shall be liable to imprisonment varying from six days to six months. For the purposes of the Act a stowaway is a person who goes or attempts to go on board ship with a view to travelling on the ship, without the knowledge of the captain. Paragraph 2 provides that persons who, either on board or ashore, encourage the embarkation or disembarkation of stowaways shall be liable to special penalties of fine or imprisonment. The frequent embarkation of stowaways is stated to be mainly due to the presence in the ports of suspicious individuals or unscrupulous agents who, in collusion with members of the crew, succeed in smuggling passengers on board without the knowledge of the captain. Paragraph 3 mentions certain extenuating circumstances to be considered in the application of the Act.

#### *Organisation of the Spanish Emigration and Colonisation Departments*

Under the Royal Order of 4 March 1922, the Spanish Ministry of Labour, Commerce, and Industry has been reorganised. Questions of emigration and settlement are placed under the control of the Labour Sub-Directorate which is attached to this Ministry. Clause 23 of the Order provides that the Emigration Department shall deal with all bodies and matters under the Emigration Act, and the regulations connected with it. It will also maintain relations with the Superior Council of Emigration and with all official bodies who deal in any way with emigration, especially the questions of staff, inspection, patents,

ports, and examination of emigrants. It will also be responsible for the financial and economic functions of the Superior Council, the local committees, emigrants' welfare societies in America, and similar bodies.

Clause 24 describes the functions of the Colonisation Department, which include relations between the Ministry and the Central Council for Colonisation and Internal Settlement, and with official bodies with similar functions. Other functions are a supervision of the application of legislation on such questions, investigation of agrarian ownership and tenancy, proposals for the amendment of existing legislation, collective agreements between agricultural employers and workers, food supply, rural housing, and statistics.

### *Foreign Workers in Panama*

By a Decree issued on 7 January 1922 the Government of the Panama Republic temporarily prohibited the entry of all foreign workers into the country, on the ground of the serious economic situation. An exception was made in favour of persons arriving in the country under an employment contract previously made, but even such persons are advised not to leave their own countries.

### *Immigration Proposals in the United States*

The Committee on Immigration and Naturalisation of the House of Representatives reported favourably on the extension for another year of the Three Per Cent. Act, and on 20 January the House of Representatives accepted the proposal by a vote of 280 to 36. The majority report of the Committee states that

the Committee on Immigration and Naturalisation has in course of preparation a complete new naturalisation code, the terms of which it is hoped will enable us to recognise clearly those among us who are truly desirous of gaining citizenship and receiving thereafter the benefits of citizenship rather than asking favours or making demands as alien residents.

The Committee believes that many of the mishaps attendant upon the inauguration of the law will not occur during its extension for one year. Reference is made in this connection to the short time intervening between the enactment of the law and the beginning of its operation, to the placing of United States visas on passports in excess of quotas, to the fact that from Persia and some countries with small quotas a few immigrants started for the United States months before the law was enacted and arrived months after it was in operation, and to the case in which 450 or more Armenians born in Turkey were brought in and on arrival found the Turkish quota exhausted. The Committee thinks that for a new law dealing with human beings there have been remarkably few difficulties in administration, and concludes that until a better plan can be devised it is advisable to retain an emergency law.

On 20 January the Secretary of Labour declared in an interview that hundreds of aliens were being illegally brought into the United States. Such illegal entries were being made from the Bahamas and Cuba into Florida, across the Mexican border, and through Canada. The report of the Legislative Committee of the American Federation of Labour supports this statement. The Committee thinks that the neglect of Congress to appropriate sufficient money to control the Mexican and Canadian borders is responsible for the great influx.

The administration of the immigration law has recently been criticised from a different point of view. It is stated in a recent article <sup>(16)</sup> that neither the Department of State, which supervises the immigration machinery in Europe through its consulates, nor the Department of Labour, which supervises immigration matters in America, should deal with the question at all. The suggestion is made that a small Federal Immigration Commission, composed of men whose training and achievements mark them as being competent to act as members of such an important body, should be appointed for this purpose.

Another point was raised by Mr. W. W. Peters, representing the Commissioner-General of Immigration, who stated, at a Conference held in New York in January on the initiative of the Y. W. C. A., that the Department of Labour had recently sent government representatives to several large European cities to investigate requests for visas, thus initiating the attempt to enforce the immigration law on the European side.

An article in the *Immigrant* for February 1922, which gives a six months' survey of the operation of the Three per Cent. Act, suggests that the human hardships involved in it can be remedied (1) by means of new legislation ; (2) by administrative means, such as a more careful issue of visas by the United States consulates ; and (3) by diplomacy. With regard to the third method, reference is made to the possibility of an agreement being reached between the United States and the various countries of emigration and to the Emigration Commission of the International Labour Office, which "offers a unique opportunity for emigration and immigration countries to get together to consider and discuss problems of migration".

Among new Bills recently introduced, reference may be made to one (S. 2866) introduced by Mr. Dillingham in the Senate, which provides that any person, including transport companies, bringing to the United States any alien not admissible by the terms of the Act, shall pay to the collector of customs \$100 for each such alien, and, in addition, a sum equal to that paid by the alien for his transport from the initial port of departure to the port of arrival. A resolution introduced by Mr. Johnson (H. J. 237) on 19 December 1921 would enable the Secretary of Labour to delay the deportation of persons arriving in excess of quotas for a period not to exceed six months. This would refer only to relatives of citizens or residents of the United States. On the same date a Bill was introduced in the Senate by Mr. King to create an Immigration Board and establish a system of alien registration. A Bill (S. 2988) was also introduced in the Senate by Mr. Robinson to make permanent the admission of aliens who have been permitted to land temporarily in excess of their country's quota <sup>(17)</sup>.

#### COLLECTIVE RECRUITING OF LABOUR

##### *Recruiting of Labour in Italy for Abroad*

The Italian Commissioner-General of Emigration, in the interview already noted <sup>(18)</sup>, described the conditions under which collective recruiting of labour in Italy for abroad is at present carried on. As

<sup>(16)</sup> Kenneth ROBERTS in the *Saturday Evening Post*.

<sup>(17)</sup> *Foreign Born*, Feb. 1922. New York.

<sup>(18)</sup> See p. 812 ; interview reported in *Corrispondenza Settimanale*, published by the Umanitaria Society.

regards individual emigration, that of isolated individuals or single families, the Department merely exercises general supervision and protection as provided by law for all emigrants, but in the case of collective emigration under employment contracts, it has a controlling authority which has been influential in obtaining for these emigrants suitable guarantees of satisfactory legal, economic, and social treatment. The Department is empowered to examine employment contracts, and, if necessary, to amend them. In so doing, the Department has made the most of a system only sketched in outline by legislation. By these means it secures the insertion in employment contracts of conditions to supplement the inadequacy of social legislation in many countries, and to secure fair treatment for Italian emigrants. The insertion of these clauses in a large number of such contracts tends to establish a "customary law" which will provide a basis for future international agreement.

As a result of this action, a great many Italian workers in foreign countries enjoy privileges affecting wages, social insurance, the safeguarding and despatch of their savings, health protection, and many other protective measures which they could never obtain themselves from foreign employers.

The importance of this work is emphasised by the fact that in the last three years the Department found employment abroad, under approved employment contracts, for 150,000 workers, who send home every year more than 1,000,000,000 lire in savings. This work on the part of the Emigration Department is a step in the direction of the practical achievement of organised emigration, by associations, labour co-operative societies, and associations of capital and labour, under which Italian emigrants can gain the greatest material and social advantages abroad.

#### *Recruiting of Agricultural Workers for Germany in Czechoslovakia (19)*

Negotiations, at which representatives of German employers and workers were present, took place at the beginning of February between representatives of the Czechoslovak Government and the German Central Office for Workers, regarding the conditions on which emigrants from Czechoslovakia may be recruited for employment in Germany. This recruiting may only be carried out through the employment exchanges and the provincial labour offices, which are in constant contact with the German Central Office. The Czechoslovak representatives laid particular stress on the condition that workers should not suffer from any depreciation of the German currency which might take place during 1922. They proposed that the workers should receive pay, at the current rate of exchange, corresponding to the normal wage in Czechoslovakia (about 8 kronen a day). This was not accepted by the German representatives, who made a counter-proposal to the effect that the immigrant workers should be employed only in places where wages are already sufficiently high, as for example in the Rhineland, Hanover, Saxon-Anhalt, etc.

With regard to the retention of part of the wage, amounting to 10 marks per week for 15 weeks, as a guarantee against a breach of contract, and the deposit of 200 marks for the tools, etc. supplied, an agreement was reached to the effect that the German Central Office

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(19) *Der land- und forstwirtschaftliche Arbeitgeber*, 27 February 1922. Berlin.



would calculate the value of these sums at the average rate of exchange prevailing during the period of the contract, and that the employer would refund the money on that basis. It is believed that, with the removal of the difficulties which have hitherto prevented Czechoslovak seasonal workers going to Germany, about fifteen or twenty thousand of these immigrants may be expected during 1921.

## WELFARE AND PROTECTION WORK

### *Attitude of the British Labour Party*

In an article in the *Labour News*, the official organ of the Labour Party, on 16 February 1922, the report of the Oversea Settlement Committee for 1921 <sup>(20)</sup> is criticised.

To export our young people and import food from overseas instead of setting them to work in growing food at home does not strike one as an excessively intelligent policy. Better to emigrate than starve, but is this country so overcrowded that we have a surplus population of young, capable, and vigorous workers which we can afford to lose? State-aided emigration may ease the unemployment problem at home and make matters worse in the Dominions . . . Neither in this country nor in the Dominions will Labour regard state-aided schemes of land settlement as a remedy for unemployment . . . The report of this Committee illustrates the need for consultations between British Labour and Labour in the Dominions on the policy to be adopted with regard to emigration and kindred problems.

### *Education of Emigrants in Italy*

The American Act of 1917, instituting a literacy test for immigrants, drew the attention of the Italian Emigration Department to questions of education. On the initiative of this Department, evening schools and holiday schools were opened in many districts for the benefit of emigrants who were totally or partially illiterate. In 1920, 790 such schools were opened, especially in the Abruzzi, Campagna, Calabria, and Sicily. These schools were attended by 28,000 pupils, of whom 15,000 sat for the examination.

In 1921 the Ministry of Education took over this work by instituting a national campaign against illiteracy, founded largely on the experiments made by the Emigration Department. This work having passed into other hands, the Emigration Department then took up more specialised emigrant instruction, both for general and vocational education. Special courses were set up side by side with those arranged by the Ministry of Education, and also vocational courses for cement workers, plasterers, gardeners, carpenters, engineers, needlewomen, etc. Building yards were opened for technical instruction to masons, and courses in colonial agriculture for agricultural and mathematical students, with a view to the awarding of scholarships.

The object of the educational policy of the Emigration Department is twofold; first to increase the wages of unskilled workers, thereby enabling them to send home larger savings, but even more to increase the prestige of the Italian worker, and thus increase the social influence of the Italian emigrant population.

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<sup>(20)</sup> *International Labour Review*, Vol. V, No. 4, April 1922, p. 636.

*Swiss Philanthropic Societies*

On 30 January 1922, the Swiss Federal Government issued a circular to Cantonal governments on the subject of subsidies to Swiss philanthropic societies abroad paid during 1921. In this circular it is stated that the grants from the Cantons amounted to a total sum of 28,500 francs, as compared with 29,200 francs in 1920. The contribution of the Federal Government was 40,000 francs. A table is appended to the circular giving details of 143 Swiss philanthropic societies, 13 Swiss national associations, and 26 homes and hospitals, making a total of 182 Swiss societies and institutions as compared with 192 in 1920. The table gives particulars in each case of the total funds of the society in 1920 and 1921, receipts and relief granted in 1920, expenses of management, etc., and the amount of the annual grant from the Confederation and Cantons. The largest grant (namely 10,000 francs) was made to the Swiss Benevolent Society (*Société Helvétique de Bienfaisance*). Many of these societies gave up any claim to grants.



# INDUSTRIAL HYGIENE

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## The Opinion of the Governments of the Australian States on the Use of White Lead in Painting

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**I**N order to obtain sufficient information to reply to the questionnaire of the International Labour Office—issued in preparation for the 1921 Conference—on the prohibition of the use of white lead in painting, the Australian Government referred this questionnaire to the States of the Commonwealth for consideration and report. In connection with this reference, the New South Wales Board of Trade decided to conduct an enquiry on the use of white lead in painting, its dangers and their prevention. During the enquiry, which opened on 22 June 1921, 19 public sittings were held, in the course of which 52 witnesses were examined. The published report<sup>(1)</sup> of this enquiry and the replies of the other Australian States did not reach the International Labour Office until after the close of the 1921 Conference, but the reports seem of sufficient interest to call for a summary of the principal points.

### NEW SOUTH WALES

The volume published by the New South Wales Board of Trade contains first a general report of 79 pages divided into several chapters including : Introductory ; The Chemical and Physiological Data ; The Public Vital Statistics and their Interpretation ; The Evidence from Administrative and Trade Experience ; General Conclusions. This part is followed by the verbatim report of the sittings, statistical tables, and other appendices, making in all 771 pages.

The chief subjects discussed in the chapter on the physiological data are the channels through which the poison may gain entrance to the body and the distinction between "lead absorption" and "lead poisoning". After a reference to the cumulative action of lead and the varying degrees of poisonousness of different lead compounds, there is a survey of the commonest forms of lead poisoning. The proper definition of lead poisoning is discussed and the extent to which individual characteristics increase or decrease susceptibility to poisoning. The different symptoms for the diagnosis of lead poisoning are then discussed : blue line on the gums, colic, paralysis, presence of basophile granules in the red corpuscles, and nephritis. The experience of Professor Chapman and Dr. Smith provides grounds for laying special emphasis on the last of these symptoms.

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(1) AUSTRALIA, NEW SOUTH WALES, BOARD OF TRADE : *Report of the New South Wales Board of Trade on White Lead as used in the Painting Industry : Its Dangers and their Prevention*. With Appendices, Evidence, Addresses and Exhibits. pp. LXXIX+771. Sidney, William Applegate Gullick, Government printer. 1921. [33569 (a).]

Without any wish to undervalue the Australian report, it is none the less to be regretted that the only authorities quoted in this interesting enquiry are a portion of the report of the British Departmental Committee, the book *Lead Poisoning and Lead Absorption* published by Dr. Legge and Sir Kenneth Goadby in 1912, Dr. Hamilton's pamphlet *Hygiene of the Painters' Trade*, and Sir Kenneth Goadby's lecture before the Royal Society of Arts on *Immunity and Industrial Diseases*. It would have been interesting to have had also some account of the experience of other countries, such as France, Germany, Austria, Italy, the Netherlands, Belgium, and others.

The chapter on statistics gives the number of deaths of male workers aged 15 and upwards, the death rates for different age groups, the average age of death in various occupations, and the numbers as given by the 1911 Census of painters and of workers in other occupations. As the accuracy of the conclusions drawn from the figures was likely to be affected by war conditions, the figures for 1915 were selected in order to reduce this error to a minimum. The statistics for that year show that for painters the largest proportions of deaths occurs in the age period 50 to 54, while for carpenters, who may be taken as fairly typical of bread-winners generally, the largest proportion of deaths occurs in the age period 60 to 64. For painters the average age of death is 53.5, for carpenters 60.9, and for all occupied bread-winners 57.1. These figures are for workers aged 15 and over. For workers aged 20 and over at death the figures are : painters 54.2, carpenters 61.6, all bread-winners 57.8.

Assuming that the distribution by age and occupation is the same as at the Census of 1911, the estimated death rates for painters and males in all occupations, based on deaths during the period 1909-15, are as follows (\*):

Age group	Painters	All occupations (except independent and indefinite)
All ages 15 and over	12.9	12.0
15-19	2.8	2.0
20-24	2.5	3.5
25-29	4.1	4.3
30-34	6.6	5.0
35-39	6.9	6.4
40-44	11.1	8.0
45-49	14.6	11.0
50-54	21.5	14.9
55-59	30.8	22.1
60-64	43.2	31.3
65-69	68.7	48.2
70-74	118.0	77.0
75-79	143.0	129.0
80-84	352.0	228.0
85 and over	430.0	432.0

"If the death rates of painters at the various ages be applied to the population of males in 'all occupations', " the Report goes on, "the

(\*) *Op. cit.*, p. 40, Exhibit No. 22.

resultant death rate is 15.7 per thousand. This may be taken as the index of mortality for the painters and as comparable with 12.0 for all occupations".

Out of a thousand men aged 20 the number of survivors at the ages stated would be as follows:

Age	Painters	All males
20	1,000	1,000
30	965	960
40	905	905
50	795	815
60	610	680
70	350	460
80	90	170
90	10	20
100	—	—
Expectation of life at age 20	About 42 years	About 45 years

The following table for various causes of death shows the excess of deaths for painters due to certain diseases (\*):

Class	Cause of death as proportion of all deaths				
	All causes	Lead poisoning	Bright's disease	Tuberculosis (all forms)	Lead poisoning, Bright's disease and tuberculosis (all forms)
(1)	(2)	(3)	(4)	(5)	(total 3-5)
Alloccupations (Commonwealth, males, aged 15 years and over).	1,000	0.4	55.2	90.4	146
Painters (New South Wales, aged 15 years and over).	1,000	16	152	128	296

It follows that for every thousand deaths the extra death rate per thousand due to lead is 150.

At the request of the Board, their Statistical Officer asked the State Inspector-General of Mental Hospitals for information as to the frequency of lead poisoning as a causative factor in insanity. The available data are incomplete, but the records of one of the largest mental hospitals in the State seem to admit of the conclusion that the insanity rate for painters (insanity due to lead poisoning) is about 1.2 per thousand deaths per annum, while for all workers the rate is 0.8. The Report points out that these figures must be taken with important reservations, on account of the omission of painters not employed on buildings, and on account also of the absence of any

(\*) *Op. cit.*, p. 736. Exhibit No. 16.

satisfactory definition of lead poisoning from the medical point of view. The figures are therefore merely quoted here without any criticism of the conclusions which have been drawn from them.

An enquiry on the frequency of tuberculosis and of pneumoconiosis among the miners of Broken Hill gives the Report the opportunity of discussing the connection between tuberculosis and lead poisoning. The irritant effect of dust on the respiratory system is, of course, admitted; the question at issue is rather how far tuberculosis among painters is directly due to lead poisoning. There has been prolonged discussion on the question and some authors are not yet agreed on a definite answer to it. In this case, too, it does not seem very easy to compare the working conditions of the miners, who are exposed to more or less silicious dust containing a very high percentage of galena and blende, with the working conditions of painters.

Attention is also called to the question of arterio-renal symptoms in persons suffering from lead poisoning to a greater or less extent. The opinion is expressed that there are strong grounds for attributing many of the cases of nephritis occurring among painters to substances other than lead, namely, zinc oxide and turpentine. The data quoted in support of this theory are, however, the result of experiment rather than of clinical observations. The occupational poisoning of painters is not at all comparable with the acute and sub-acute symptoms observed in animals exposed to the action of turpentine and zinc oxide. Further, if it is admitted, as it has been, that chronic nephritis can to some extent be caused by the dust of lead sulphide (a substance which most writers consider to be only very slightly poisonous or even—with Ramhousek—harmless on account of its insolubility), and if Legge and Goadby's conclusion is accepted (that chronic nephritis among workers in lead industries might be one of the sequelae of lead poisoning), it does not seem necessary to bring in turpentine in order to explain lead poisoning among painters who use a lead compound which is much more poisonous than lead sulphide (galena).

The chapter on administrative and trade experience deals first with hours of work, which are of only secondary interest for the subject. It goes on to discuss the right to compensation under the Workmen's Compensation Act of 1916 and points out that the Act has only been applied to very few cases. It then describes the experience of various State and Federal establishments with respect to lead poisoning. It may be noted in particular that the Metropolitan Board of Water Supply has made considerable use of zinc white during the last two years. In the workshops of the State Railway Department, where about 400 painters are employed, substitutes for white lead have been used for inside painting of railway coaches, and a satisfactory substitute is reported to have been found for the roofs of carriages. Cases of lead poisoning are very rare in both of these establishments. In the Randwick Tramway Workshops, too, lead compounds are not generally much used. In the Naval Dockyard, for inboard painting, lead paint is used only for the first coat.

The Report states that the data collected by the enquiry on the sickness rates of workers in State and Federal workshops are insufficient to determine the real extent of lead poisoning among painters (\*).

The Board also tried to ascertain the opinion of employers and workers in the painting trade as to the dangers of white lead. The employers invariably stated that the risk due to its use was insignifi-

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(\*) *Op. cit.*, p. xlix.

cant and that the effect of the industry on the health of the workers was not worse than that of most other trades. The workers' representatives, on the contrary, expressed great alarm with respect to the dangers of white lead and quoted the conclusions reached by the Operative Painters' and Decorators' Union during its enquiries of 1918 and 1921.

In face of these contradictory opinions the Board, at its second sitting, proposed the formation of a medical committee composed of persons having no direct interest in the question, to examine the risks of lead poisoning. The proposal was supported by the workers' advocate. Counsel representing the lead mining, corroding, and other employers' interests, however, expressed agreement in principle, but asked for time to consult his expert advisers before giving a decision. On 20 June the President of the Board addressed a letter to the Railway Commissioners asking them to undertake the proposed enquiry on painters and painters' labourers employed in their workshops. The Board's proposal was that a medical committee should be appointed for the purpose, consisting of three doctors, one the Railway Medical Officer, the second an officer of the Department of Public Health, and the third chosen by the parties concerned in the enquiry. The Railway Commissioners agreed to the suggestion, but on 15 August, after the last public sitting of the enquiry, counsel for the employers informed the Board that he and his clients could not accept the proposal in view of the practical difficulties which would undoubtedly be encountered.

The Board is of opinion that the evidence from administrative and trade experience is conflicting and unsatisfactory, but tends, nevertheless, to support the conclusions drawn from statistics. It thinks that much of the obscurity surrounding the question which seems to exist from the industrial standpoint might have been clearly illuminated by the proposed survey and considers it extremely regrettable that the employers represented before the Board would not adopt the proposal.

The last chapter of the Report contains the general conclusions arrived at by the Board as a result of the enquiry. The most important passages are given below :

The Board is able to pursue its inquiry to a conclusion without settling for its purposes the vexed question whether there are efficient and commercially available substitutes for white lead as a paint base. If it were technically possible to replace white lead in painting by efficient substitutes there would still be reasons why a Draft Convention prohibiting the use of white lead in painting should not be submitted in the name of this State to the Geneva Conference. . .

If the Board's view as to the co-efficiency of lead and zinc as causes of the tuberculosis of painters be correct, then a paint base containing 5 per cent. of carbonate of lead, or 20 per cent. of sulphate of lead, with a residue of zinc oxide, might be the cause of evils which would again give occasion for a convention of the nations.

Lead, as used in the painting industry, that is, lead principally in the form of a basic carbonate or white lead, is a substantial cause of injury and death to painters and other workmen engaged in the painting industry. As a cause of death lead is more effective in this industry than in any other occupation, but its toll of deaths, as recorded, does not by any means indicate its deleterious influence or destructive power.

The Board then states that the figures disclosed by the British Departmental Enquiry were considered sufficiently grave to call for some action. In America, too, the question of lead poisoning is con-

sidered serious, though the recorded death rate is comparatively low. "It is rather because of complications resulting from gradual lead absorption as a factor in other diseases, including pulmonary tuberculosis, than as a direct cause of death that lead poisoning assumes importance in occupational or industrial hygiene".

The average number of deaths of painters in New South Wales from lead poisoning may not be impressive, but the pure death rate is strictly comparable with English experience, and the complication death rate, while unknown, is at least substantial. The attack rate is another matter. It is not possible to derive an attack rate of painters on the basis of factory experience in New South Wales, but it is perhaps reasonable to make certain inferences in relation to painters from the experience of the Technical Commission of Inquiry at Broken Hill. Nine per cent. of the 3,968 persons included in the Broken Hill survey were found to show arterio-renal symptoms which might have been due to lead absorbed as the result of exposure mainly to the dust of sulphide and oxide ores. This mixed dust must have been much less soluble, and therefore much less noxious, than the carbonate of lead dust to which painters are exposed. In fact the vital statistics show that for every nineteen miners who die from lead poisoning in a series of years there are twenty-two painters who die from the same cause. If the dusts were equally noxious, and the exposure comparable, the same consequences might be expected to arise in each case; and a rate of prevalence of lead poisoning of 9 per cent. in the case of painters might thus be derived. But the uncertain factor of the relative exposure need not be given undue weight, for the vital statistics show that whatever the degree of exposure in the case of the painter, the joint effects of exposure and toxicity of the carbonate of lead dust make his position distinctly more sinister than that of the miner. The rate of prevalence of arterio-renal lead poisoning amongst painters would thus be in the neighbourhood of 11 per cent. The Broken Hill Survey indicated that there were 113 who showed symptoms not arterio-renal that might have been due to lead, and 254 who exhibited signs of pneumoconiosis and tuberculosis. If all of these persons be regarded as the subjects of lead poisoning and if the rate of prevalence amongst painters be thus derived at 22 per cent., the conditions of the New South Wales painters would be only half as bad as those of the 402 actively employed New York painters who were examined by Dr. Louis I. Harris, the Director of the Bureau of Preventible Diseases, New York City Department of Health, in 1917-1918.

In the absence of morbidity statistics it is only possible to base conjectures as to the prevalent degree of sickness from lead poisoning on the mortality rates. Mortality statistics are of little value in a study of lead poisoning. "Rarely", says Dr. Alice Hamilton, "does a painter die of uncomplicated and typical lead poisoning. The immediate cause of death is usually some chronic lesion which has been set up by the slow absorption of lead, but the physician, in making out his death certificate, gives the disease which is, strictly speaking, a secondary cause of death, as the principal cause, and the underlying chronic plumbism is either omitted or mentioned as a contributory cause". Interpreting, then, the death statistics for lead poisoning and for the allied group of diseases, as the Board considers they ought to be interpreted, the conclusion arrived at is that the health conditions of the painting industry in New South Wales are as prejudicial as they have been found to be in England, and present real evils which are preventable and call for determined action in the public interest.

The Board, having arrived at the conclusions indicated, has carefully considered what should be the nature of the action to be taken in the public interest. Immediate prohibition or restriction of the use of white lead is, the Board finds, not the appropriate remedy for the evils disclosed. There is, perhaps, no more reason at the moment for the prohibition of the use of white lead in paints than there is for the prohibition of lead mining at Broken Hill or elsewhere in the State, and, indirectly, for the prohibition of the mining of precious metals that are to be found in geological association with lead bodies.



Further on, the Board quotes the opinion of various English medical authorities who see no necessity for prohibition of the use of white lead in painting, and hold that the evidence in favour of prohibition is still incomplete. The Board also agrees that the case for prohibition is not yet made out and thinks that there is not much hope of the question being settled until medical science draws a clearer line between lead absorption and lead poisoning. The Report continues :

Prohibition of the use of lead might render the dust inhaled by the painter innocuous if a combination of zinc dust and siliceous particles did not prove equally deleterious . . . Again, by common consent of the medical witnesses and the English medical authorities, lead dust and turpentine vapours are independent if co-existent causes of the arterio-renal disease from which painters suffer, but to what extent the health conditions of painters are seriously prejudiced by these vapours, or, indeed, those of the other volatile substances with which they are in daily contact, science cannot at present say. Some proportion, however, of the damage caused to the painter's health by the materials with which he works must be assigned to turpentine, and possibly to a combination of turpentine vapours and lead dust. The prohibition of the use of lead in paints will probably not prevent paint sickness of the nephritic type.

The Board cannot recommend even partial restriction of the use of white lead in paints or pigments in view of the serious effect, comparable with that of complete prohibition, which it would have on the local lead mining industry. It can see no way of measuring the degree of restriction which would be necessary in order to prevent dangers arising from the unrestricted use of white lead in paints. Regulation of the painting industry it does, however, consider immediately necessary, both in the interests of the painters and of the community. In support of this view, it quotes the measures prescribed by the English Factory and Workshop Act (protection against dust, provision of washing accommodation, mess rooms, overalls, cloak rooms, etc.) but adds that these provisions, admirable as they are in many ways, would, in the opinion of the British Departmental Committee, be costly and difficult to apply in the painting industry.

The Board suggests the possibility of framing a law to deal with lead poisoning on the lines of the English Workmen's Compensation (Silicosis) Act of 1918. Regulation, to be complete, would have to give the doctors power to suspend or prohibit the employment of persons threatened with lead poisoning. The scientific aspect of the problem is that the specially susceptible should be saved from the accidents to which an industry may expose them and that all necessary safeguards should be provided for the others.

With respect to the employment of women and young persons, the Board recommends measures of special protection on the lines of the English Women and Young Persons (Employment in Lead Processes) Act of 1920, which was passed on the recommendations of the International Labour Conference held at Washington in 1919.

#### COMMONWEALTH OF AUSTRALIA

The following memorandum has been submitted to the Government of the Commonwealth by the Director-General of Health at Melbourne :

The question of lead poisoning in Australia has been investigated as carefully as the time available would permit. Information is of a disconnected kind, but throws a certain amount of light on the proposal of the International Labour Conference to prohibit the use of white lead in paint.

The first information may be given in the following table, which shows, according to the Commonwealth Statistician, the number of deaths from lead poisoning in the different States :

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
1908	7	1	4	1	—	—
1909	2	2	2	2	1	—
1910	5	5	3	1	1	—
1911	3	1	3	—	—	—
1912	3	1	1	1	—	—
1913	3	1	6	—	—	—
1914	3	—	3	—	—	—
1915	3	3	2	2	—	1
1916	5	3	8	2	—	—
1917	7	1	6	4	—	—
1918	6	—	3	—	1	—
Total	47	18	41	13	3	1

From this it will be seen that 123 deaths have occurred from plumbism during the last 11 years in the Commonwealth. This represents an exceedingly low rate if chronic plumbism were to be accepted as being at all widely distributed.

The importance of lead poisoning has not been urged in any State except Queensland, where there has been a good deal of attention directed to this disease by reason of the denunciation by Dr. Turner and Dr. Gibson of the use of white lead for painting the exterior and interior of wooden houses. The two doctors concerned have conducted a campaign for more than 20 years, insisting upon a prevalence of plumbism in children greater than was generally recognised and on the theory of causation advanced by Dr. Gibson.

The theory is that the lead-compound paint used for painting, either externally or internally, but particularly external surfaces, had become dried, oxidised and disintegrated under the combined effect of heat and sun, and was readily accessible, in a finely powdered form, to the hands and faces of children, being ingested in one of the numerous ways by which such powder might be conveyed to the mouths of children or inhaled.

On this theory the distribution of lead poisoning should, it would be thought, have been found to be very extensive.

In 1904, the figures available show that Dr. Gibson reported that between 1898 and 1903, that is 6 years, 85 cases had been treated as in-patients at the Children's Hospital, Brisbane. In 1905, Dr. Gibson further gave the total number of cases admitted to the same hospital from 1891 to 1905 (14 years) as 200, giving approximately 15 cases per year.

Following upon the representation of these two doctors, the Queensland Branch of the British Medical Association waited upon the Home Secretary of Queensland on 12 July 1918, asking the Minister to include a clause in a Bill to amend the Health Act dealing with the use of lead in paint on surfaces within the reach of children.

It was arranged that a Conference should be held between the Council of the Queensland Branch of the British Medical Association and the representatives of the Master Painters' and Decorators' Association. This Conference was held on 25 July 1918, at which the following resolutions were passed :

(1) That in order to prevent lead poisoning in children, it is necessary to prevent the powdering of lead paint within their reach.

(2) That as the powdering occurs on fences, palisades and verandah railings exposed to the weather, it is necessary to use a paint for these surfaces which does not easily powder.

(3) That a paint be used which is manufactured on a base of not greater than 60 per cent. of carbonate of lead and not less than 40 per cent. of zinc oxide. That such paint be ground by the manufacturers, either in paste or liquid form, and must bear the manufacturer's guarantee to the effect that it complies with this regulation.

(4) That the vehicle used in such paint be a mixture of genuine boiled oil (linseed) and genuine raw linseed oil.

(5) That the surfaces specified above, and within the reach of children, must be painted every three years, in order to prevent powdering. It would be advisable that these surfaces be washed down annually.

(6) That the total prohibition of white lead is unnecessary.

It should be noted that the final resolution, agreed to by both the parties in question, was that the total prohibition of white lead is unnecessary.

A very carefully controlled scientific observation was made at the Townsville Institute of Tropical Medicine by Drs. Breinl and Young. It is stated there that the urine and faeces of a number of children clinically suspected as suffering from lead poisoning have been examined chemically and the results have proved beyond doubt that lead poisoning is not an uncommon occurrence among children, lead being found in the excreta of 18 out of 22 children.

The association of lead poisoning with the disintegrated white lead paint was regarded as not proven in an Editorial article in the *Medical Journal of Australia*, which concludes a review of this subject by the statement that certain evidence suggests "that lead is not the sole etiological factor".

In my opinion, it must be concluded that the evidence which is available is altogether insufficient to justify such a sweeping change as is advocated by the International Labour Conference, and that the evidence available, at least in Australia, certainly does not justify the total prohibition of white lead in painting. It may justify certain measures of regulation in the use of white lead, which, in my opinion, is very likely to be indicated by the evidence when the latter is fully marshalled, but it would only be possible to give a reasonable pronouncement on this aspect after careful and complete investigation of the whole evidence which can be obtained.

This would probably take from six to twelve months to collect and arrange, and might perhaps be entrusted to the Commonwealth Department of Health as a function of their proposed activities in the direction of Industrial Hygiene.

#### WESTERN AUSTRALIA

The Engineer-in-Chief and the Principal Architect of the Public Works Department state that they are opposed to a Draft Convention prohibiting the use of white lead in painting. They consider that all that is necessary is that ordinary precautions should be taken in the way of carefully washing the hands before eating and the use of gloves whilst working. They base this opinion on the following points, on which all the authorities on lead industries and on occupational diseases which they have been able to consult appear to agree :

(1) White lead paint has been known on numerous occasions to produce disease, and on rare occasions death.

(2) The deleterious effects of the constant use of this material are only partly ascribed to the white lead ; at least part of the effect, and, according to some authorities, the greater part, is to be ascribed to the linseed oil and thinning oils.

(3) By far the greater part of the white lead poisoning is due to absorption of the lead in the alimentary canal, next in importance is absorption in the lungs, of least importance is absorption through the skin of the hands.

(4) Owing to there being no dry lead dust associated with a mixed paint, painters are far less affected by plumbism than workers in potteries, smelters, etc., where the air is often charged with lead dust or fume, which is inhaled, and partly collects on the back of the throat and nostrils and is ultimately swallowed, partly passes into the lungs.

(5) Painters do suffer from lead poisoning by absorption through the hands, but more frequently from scraping or burning off old paint and inhaling the dust or fume produced.

(6) More sickness is said to be caused amongst painters by the fumes from the liquid vehicle with which the white lead is mixed, viz : linseed oil and thinning oils.

(7) Linseed oil on exposure to the air, when mixed with lead pigments, gives off carbon monoxide gas, a well known and powerful poison, as well as poisonous aldehydes, also gaseous.

(8) The vapour of turpentine, benzene and petroleum spirit are all known to be injurious to the system to a very appreciable extent when inhaled continuously. All three are used as thinning oils.

(9) Much of the prevalent lead poisoning could be prevented by thorough cleansing of the hands before eating, or better still, by the wearing of gloves whilst working.

(10) White lead stands in a class by itself as a white pigment, no other substitute approaching it in opacity (body) and in the purity of its whiteness. Further, most substitutes, such as barytes and zinc oxide, are themselves appreciably poisonous.

(11) Linseed oil is incomparably better than any other available oil as a medium. It sets very quickly, produces a better surface, and is more resistant to the atmosphere than any substitute. From a health point of view, its rapid setting is a distinct advantage. Any substitute would doubtless yield carbon monoxide and poisonous aldehydes to somewhere about as great an extent as linseed oil does whilst drying.

(12) All readily volatile oils used as thinners and dryers are injurious when inhaled, but research may show that some are less injurious than others. There is no existing data dealing with this aspect of the question.

#### SOUTH AUSTRALIA

The reply of the Government of South Australia is as follows :

I desire to inform you that careful enquiries have been made through the State Director of Chemistry, the Chief Inspector of Factories, and two of the leading Insurance Managers dealings with Workmen's Compensation in respect to the matter of the injurious effect of the use of lead in paints. These gentlemen are practically unanimous that under present conditions cases of the disablement or death due to lead poisoning from paints are so rare that no records are available in respect of same in this State.

In the circumstances, this Government cannot see its way to support any legislation to prohibit the use of White Lead in paints, as the evidence available does not warrant any interference with such an important industry as that of the manufacture of white lead.

#### QUEENSLAND

The Government of Queensland has submitted the following observations :

At present there is no legislation on the Statute Book of Queensland directly bearing on the subject of white lead poisoning, although at present a Bill is being drafted containing the following : " On and after a date to be decided upon no paint containing more than 5 per cent. of soluble lead shall be used on walls, etc., within 5 feet of the floor on the inside or of the ground on the outside of any residence ".

There are roughly 3,479 persons engaged in operations associated with lead, in one or more of its forms, in Queensland. Of this number, 1,452 are painters and decorators, 1,329 plumbers, 292 lead workers and the remainder tinsmiths and galvanised iron workers.

No definite record exists as to the number of cases of plumbism that have occurred amongst house painters, beyond seven for whom compensation was claimed under the Workers' Compensation Act. This number was spread over the three years 1917-1918, 1918-1919, and 1919-1920, and during that same period 15 cases of plumbism occurred amongst other sections of the community.

There are only 2 establishments in Queensland for the treatment of lead ores, and last year the output of lead was 1,708½ tons. There are no zinc works in this State.

So far as actual fatalities are concerned, the records of Queensland for a period of many years past disclose only eight cases. Four were children; two, young men between the ages of 20 and 25; one a youth of 18; and one, a man aged 68 years. In each of these cases death was attributed to plumbism.

#### TASMANIA

The reply of the Government of Tasmania is as follows :

According to evidence it appears that no efficient and satisfactory substitutes for white lead are available. It therefore becomes a matter to be considered from the economic point of view; further, it does not yet appear to be definitely settled by experts whether the ill effects occurring to those who use white lead are really due to the white lead or whether they arise from the dust and fumes from hydrocarbons such as turpentine which would still be a potent factor in the use of any pigment.

Under these circumstances, the opinion is held that prohibition should not be imposed on the use of white lead until research has definitely proved its injurious effects; and from the economic point of view until such time as proof is forthcoming that reliable substitutes are available.

# GOVERNMENT REPORTS

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## FACTORY INSPECTION IN JUGO-SLAVIA <sup>(1)</sup>

**T**HE first annual report of the Labour Inspection Department in Jugo-Slavia has already been briefly noticed in an earlier number of the *Review* <sup>(2)</sup>. A more complete description of the contents of this publication is now given.

After the Revolution of November 1918, which led to the union of Serbia, Croatia, and Slovenia, an entirely new legislative task had to be taken in hand: no less than five different systems of law had to be unified with the least possible delay. These five different systems of law were those which had been current in (1) Slovenia and Dalmatia, (2) Croatia, Slovenia and the Banat, (3) Bosnia and Herzegovina, (4) Serbia and Macedonia, and (5) Montenegro.

Codification had, of course, previously been impossible, but it was obviously urgently necessary to develop a uniform organisation for the administration of the workers' protection laws and to create a Labour Inspection Department. For this purpose a conference was convened at Agram in May 1919 to examine the principal measures of social legislation, e. g. those relating to the 8-hour day, labour councils, employment exchanges, and industrial inspection. The Minister of Social Affairs acted as convener of the conference, in which representatives of employers, workers, and local authorities took part. As a result of this conference, an Order relating to industrial inspection was drafted, and it was unanimously resolved that the members of this service should as soon as possible be distributed throughout the country and placed under one authority. To this day, however, no Order for the uniform organisation of the industrial inspection service has been issued. Still, a vote providing for thirty industrial inspectors and the necessary auxiliary staff has been approved in the 1920-1921 budget.

The officials of the industrial inspection service, as at present organised, are entrusted with duties relating to the protection of workers in all undertakings, irrespective of their scope and nature. The only exceptions are railways and mining undertakings; the 8-hour day regulations do not apply to railways and special regulations and a special inspection service must consequently be provided; mining undertakings still have a special inspection service.

The field of inspection is practically unrestricted and includes the protection of the workers' life and health, supervision of hygienic conditions in all undertakings, housing, the legal relations and the economic and industrial situation of the workers, efforts to achieve intellectual and social amelioration, and, finally, education of the workers on public health questions.

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<sup>(1)</sup> KRALJEVINA SRBA, HRVATA I SLOVENACA, MINISTARSTVO SOCIJALNE POLITIKE: *Izveštaj inspekcije rada kraljevine Srba, Hrvata i Slovenaca o njenom poslovanju u. g. 1920* (SERBO-CROAT-SLOVENE KINGDOM, MINISTRY OF SOCIAL AFFAIRS: *Report of the Labour Inspection Department for 1920*). 240 pp. Belgrade. 1921.

<sup>(2)</sup> *International Labour Review*, Vol. V, No. 3, Mar. 1922, p. 516.

The size of inspection areas is fixed according to density of industrial population and not according to geographical extent. The various industrial inspection officials have independent authority (p. 10). The country was divided into eighteen industrial districts by a Decree of the Minister dated 10 July 1920. All these constitute independent jurisdictions and are under the supervision of the Central Labour Inspection Department of the Ministry of Social Affairs at Belgrade (p. 20).

The following points from the report of the central authority are worthy of note.

Only twelve industrial inspection officials were at work during 1920 (p. 21). During this year 1,138 undertakings, employing 36,027 persons, were inspected; 279 of these undertakings were commercial and 850 industrial<sup>(\*)</sup>; 397 used mechanical power and the rest were entirely dependent on man-power. The age-distribution of the 36,027 persons employed in the above-mentioned undertakings was as follows:

*Male workers*

36	under 12 years of age
1,791	between 12 and 16 years of age
26,486	above 16 years of age

*Female workers*

37	under 12 years of age
1,127	between 12 and 16 years of age
6,550	above 16 years of age

These numbers, however, do not correctly represent the total number of workers in the country, since industrial inspection is not yet carried on in every district; even in areas where it has been begun, it has proved impossible to visit all undertakings on account of the inadequacy of the available staff. It may be anticipated that complete statistical returns will be presented in 1922 (p. 24).

Before the war it was not specially advantageous to employers to engage either unmarried or married persons, since each worker was paid according to ability. These conditions have been changed in an important respect. A basic wage is now paid, to which bonuses are added according to the responsibilities of the worker for wife, children, parents, etc. It is therefore cheaper for the employer to engage unmarried persons, and married workers are being dismissed and replaced by unmarried ones. It is obvious that this produces an intolerable situation, which calls for relief at the earliest possible moment (p. 44); the number of married persons who are unemployed increases daily.

Complaints of the illegal employment of young persons and women are very common, and the regulations on hours of work are being disregarded; in southern Serbia, in particular, the daily hours of work still amount to more than 14. The Decree of 26 September 1919, however, prohibited night work in bakeries in Slovenia. In Dalmatia an agreement to the same effect was concluded between the employers and workers (p. 47). No complaints have been made in respect of Sunday and holiday rest; on the contrary, the Saturday afternoon holiday has been introduced in many undertakings (p. 48).

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(\*) The report does not account for the other 9.

The report on general hygiene and technical conditions in the workplaces is far from satisfactory. All the labour inspectors deplore the bad state of affairs prevailing in most of the undertakings. Conditions are at their worst in Uskub (p. 28). In the southern part of Serbia steam boilers are usually in bad condition, owing to lack of regular examination (p. 29). In Bosnia and Herzegovina the heating arrangements and the state of the workrooms leave much to be desired. Lighting is satisfactory only in large undertakings with their own electrical generators (p. 31). No attention whatever is paid to ventilation, as may be judged from the number of tuberculous persons met with (p. 34). Precautions against fire are rarely taken (p. 35). Persistent emphasis is laid on the fact that, as the industrial crisis has developed, workers have entirely ceased to trouble about the cleanliness and the hygienic condition of apparatus in the workrooms (p. 37). In connection with occupational accidents it should be specially noted that hitherto there has been no accident insurance system in Serbia or Bosnia and Herzegovina, and that in Serbia the employer is not as a rule bound to notify an accident (p. 40). The statistics mention 836 accidents, including 32 which were fatal (p. 41).

#### FACTORY INSPECTION IN WESTERN AUSTRALIA IN 1920 <sup>(1)</sup>

The Chief Inspector of Factories for Western Australia is under the control of the State Commissioner of Public Health, and his annual report for 1920 is published as an appendix to the return made by the latter official (pp. 27-32). He is responsible for supervising the administration of the Factories Act 1904, the Early Closing Act 1902, the Employment Brokers Act 1909, the Shearers' Accommodation Act 1912, and the Footwear Regulation Act 1916. His Department has also to supervise the observance of awards and agreements under the Industrial Arbitration Act 1912. All these duties were carried out in 1920 by a staff of five persons — the Chief Inspector, one woman inspector, and three men inspectors. They supervised 1,251 factories (an increase of 35 over the previous year), employing 14,564 persons (13,167 in 1919), of whom 3,237 (3,009) were girls and women. Over one quarter of these were employed in woodworking, and one sixth in the metal trades. These totals include 2,273 juvenile workers (persons under 19 years of age) — boys and girls in almost equal numbers. Of the 1,251 registered factories 926 employed fewer than 10 persons, and only two employed more than 200 persons. Five-sixths of these factories used mechanical power of some kind.

During the year 5,051 inspections were made under the Factories Act (4,773 in 1919). Orders were served for the rectification of 113 defects (53 relating to unsatisfactory sanitary conveniences and 33 to accumulations of refuse); occupiers were generally found ready to comply with instructions. Only six prosecutions were instituted, four in connection with factories occupied by Asiatics <sup>(2)</sup>, and three of these relating to hours of work.

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<sup>(1)</sup> WESTERN AUSTRALIA: *Report for the Year ending 31 December 1920 upon Medical, Health, Factories, and Early Closing Departments*. 32 pp. Perth, Government Printer. 1921.

<sup>(2)</sup> The employment of one Asiatic is sufficient to constitute a factory; if no Asiatics are employed, the employment of six persons is necessary to constitute a factory.



The Early Closing Act was in operation in 41 districts in 1920, and 1,540 inspections (other than patrol inspections) were made in order to check its observance. Sixteen prosecutions were instituted, and 15 convictions secured, most of them for failure to close at the prescribed hour. The enforcement of the Act presents special difficulties in the case of "mixed businesses", i. e. shops dealing in several classes of goods, the hours for the sale of which end at different times in the evening. The Inspector notes that similar difficulties have been met with in Victoria, and that from 1 January 1921 onwards mixed shops in this State will cease to benefit by permission to sell certain classes of their goods at later hours than other classes.

Under the Employment Brokers Act 45 inspections of records were made in connection with the 13 establishments holding licenses. No offences were detected, but it was observed that the fees charged by different brokers to their clients varied considerably in amount. There were 205 inspections under the Footwear Regulation Act, which requires the stamping of footwear by the manufacturers with certain particulars as to manufacture. It is reported that retailers now habitually refuse any unstamped goods sent by importers or producers.

Owing to the limited staff of the Department and the amount of travelling to remote districts involved, inspections under the Shearers' Accommodation Act are made by the police. The number of reports received from them in 1920 was 77, and 35 orders were made for the remedying of defects, 22 being cases of insufficient windows or lighting. The inspectors also found it impossible to undertake regular inspections for the purpose of seeing that awards or agreements under the Industrial Arbitration Act were observed. They merely investigated complaints made to them, 125 enquiries being made in this way during the year; and in each instance it was found that the offence was due to ignorance of the terms of the award or agreement in question.

#### SOLDIER SETTLEMENT ON THE LAND IN CANADA

The 1921 report <sup>(1)</sup> of the Soldier Settlement Board of Canada reviews its activities from its inception on 31 January 1918 to 31 March 1921. The Soldier Settlement Act, passed in 1917 and amended in 1919 and 1920, gave authority for the establishment of the Board and the terms of the Act are briefly summarised. The principles of the Board's policy are (1) to settle on the land soldier citizens whose best interests will be served by engaging in farming; (2) to assist in settlement only on land of good value, well located, and of such fertility as to ensure profitable returns in farming; (3) to develop and to close in settlement in areas contiguous to existing or projected railway lines; (4) to secure for soldier settlers, by means of collective or special purchase arrangements, the best value obtainable in live-stock, implements, building material, and other necessary equipment; (5) to guide and assist soldier settlers in the management of their farming activities so that the best results can be secured; and (6) to provide such guidance and assistance as may be most helpful to the settler's wife and family in the development of the home and its economic and social relations as a factor in the success of the settler.

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(1) CANADA, SOLDIER SETTLEMENT BOARD: *Soldier Settlement on the Land*; 164 pp. The King's Printer, Parliament Building, Ottawa. 1921.

The Act further defines those who are eligible and the terms according to which the Government offers free grants of land and financial assistance for the purchase of stock and equipment. Loans bear interest at 5 per cent. and are repaid by annual instalments. Every settler is required to take up actual residence on the farm, and make farming his ordinary vocation.

The extent of the operations of the Board are presented in a general statement at the beginning of the report (p. 7). The total number of soldier settlers established is recorded as 25,443, representing a population of about 100,000 persons. The area of land taken up under the Act is 4,854,799 acres, with an estimated annual production equal to that of British Columbia.

Agriculture is Canada's chief industry and land settlement on business lines increases the national growth and prosperity. On the other hand, from the standpoint of the Board the welfare of the individual soldier is the dominating interest. Accordingly, in order to ensure progress and profit, the principles underlying soldier settlement must provide safeguards for both settler and state. These principles as formulated and applied by the Soldier Settlement Board are explained at some length (pp. 9-23). They include a careful sifting of applicants, practical training, a wise choice of "suitable lands", preference for mixed or diversified rather than specialised farming, a practical administration of loans, and continual supervision.

Chapter IV (pp. 33-45) is entitled "Procedure", and follows the history of the returned soldier from the time he makes application for financial assistance to enable him to farm until he is finally established in the line of farming he decides to undertake. Soldier Settlement Board offices have been established in numerous centres, and here the eligibility of the applicant is appraised. He must have been engaged in active service with the Canadian, Imperial, or Allied forces; in the last case, however, he must have been ordinarily resident in Canada prior to enlistment. The other qualifications are physical fitness, general fitness, and agricultural experience. In certain instances further agricultural training on a farm may be recommended, while for others institutional courses of three months' duration are provided. When applications for loans are received, they are referred to the District Office Loan Committee, which inspects the land applied for and considers the report on the suitability of the applicant. If both are satisfactory, amounts are allocated for the purchase of land, stock, and equipment. The land purchase is completed by the Board's own Legal Department. The Board also inspects and purchases the stock and equipment.

The soldier farmer is launched, but he is not left to struggle through his initial difficulties alone. After settlement, the farming operations and success of the settler become the care of the Field Supervisor of his district, a man chosen because of his practical farming experience and thoroughly qualified to assist settlers in securing suitable stock and equipment and to advise them regarding proper farming methods. Meanwhile, as every sound land settlement policy must take into account the home as an important factor in the financial success of the undertaking, a Home Branch was formed to instruct the wives and dependents in poultry-raising, gardening, cooking, nursing, sewing, etc. Instruction is carried on by means of free educational bulletins and short courses at various centres, and general education is fostered by travelling libraries. The report shows that 5,700 married settlers have been visited by members of this branch.

Statistical statements of the work of the Soldier Settlement Board up to 31 March 1921 are given (pp. 46-61). The percentage of applicants

who qualified was 72.6 ; of these 19,771, or 47.4 per cent., have been granted loans, the average of each loan being \$4,065. The total amount loaned has been \$80,371,750. The average area of each farm is 177 acres. The cost of administration of the Board from the date of its establishment till 31 March 1921 was \$6,013,108. District Office statements (pp. 62-150) give practical evidence of the success of soldier settlement on the land in Canada. The concluding chapter (pp. 155-164) is biographical, and briefly relates the stories of a number of typical settlers.

#### VOCATIONAL SELECTION IN GREAT BRITAIN <sup>(1)</sup>

The preface to this report justifies the study of the question of vocational guidance by the Industrial Fatigue Research Board on the ground that "the degree of fatigue induced by a given task must clearly depend partly on the inherent capacity of the worker to perform that task, and the study of vocational selection was contemplated by the Board on the grounds that it is in its very nature a preventive of fatigue". The author points out the importance of the distinction often made between vocational guidance and vocational selection ; the former emphasises primarily the needs and abilities of the individual, while the latter approaches the same problem—that of placing new entrants to industry in the most suitable employment—mainly from the standpoint of the industry requiring the most able workers. In spite of the fact that the report is entitled *Vocational Guidance*, 43 pages are devoted to investigations in vocational selection and only four to the problems of vocational guidance.

It is urged in favour of the adoption of a system of scientific vocational guidance that it may be expected to decrease fatigue and reduce the number of industrial accidents, increase the output of the individual worker and his interest in his work, thereby reducing labour turnover. For the development of such a system it is obviously necessary to increase the number, scope, and efficiency of the investigations already made into the abilities and aptitudes required for particular occupations. The chief problems to be met in the future are the determination of the general intelligence level and of the special physiological and psychological capacities required in each occupation, and the relation of temperamental qualities to efficiency in different occupations. The question of interest in relation to the choice of a vocation and efficiency in an occupation is touched upon, but as yet there appear to have been no satisfactory conclusions reached.

The generally accepted method of determining the capacities required in any occupation is to submit a number of persons engaged in it and of different degrees of efficiency to a series of predetermined tests and to compare the result of these tests with the same persons' work records in employment. The comparison is effected by the statistical method of correlation, and expressed in correlation coefficients ranging from +1 to -1. The nearer the coefficient approaches +1, the more closely does the person's efficiency in the test approach his efficiency in industrial employment. What appears to be the gravest difficulty connected with this method of testing is that of obtaining satisfactory work records or efficiency grading in the occupation. No matter how

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<sup>(1)</sup> MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD : *Vocational Guidance (A Review of the Literature)*, by B. MUSCIO ; Report No. 12, General Series No. 4. 57 pp. London, H. M. Stationery Office. 1921. 1s.

scientific and exact it is possible to make the methods and results of physiological and psychological tests, if the only comparison is to be with an estimate of general industrial efficiency according to the opinions of foremen or employers, or piece-work earnings, or a combination of these, vocational guidance seems likely to remain in the experimental and empirical stage.

Apart from such general observations, the book is mainly occupied with a review of literature on the subject of vocational selection, which is the field in which the most exact research has been carried on, and in which, consequently, the greatest number of books and articles are available. Altogether references are given to 35 books and 26 articles in psychological journals; some of these deal with general problems of vocational guidance and selection, some are handbooks of applied psychology and of psychological tests, while the majority embody the results of individual research and experiment, covering a limited number of subjects, in the aptitudes and capacities required for a given occupation. The special investigations reported cover a variety of occupations, such as clerical employment, including typewriting and computing machine operating; engineering, including heavy muscular work, inspecting, gauging, assembling, dial machine operating, tool making, and professional engineering; music printing; salesmanship; telegraphy; telephone operating; transport work, including the work of ships' officers and street car drivers; and various "war occupations", including the American army tests and tests for special types of work, such as sound-ranging or flying. It is pointed out that, while the investigations reviewed suggest that there is a great field of practical usefulness before vocational selection, the value of past experiments is unequal; the author states that they "not infrequently give the impression of somewhat rough and ready attempts to solve practical problems; and there is sometimes about them an air of accidentalism".

The tests described fall roughly into two classes: those which seek in some way to reproduce the actual operations required in the occupations under consideration, and those which attempt to test general intelligence and abilities. In the former class is a very interesting and elaborate experiment made at Hamburg to test street car drivers. The apparatus reproduced almost all the ordinary conditions and emergencies of a car driver's work, requiring a very great variety of responses from the subject. The test was found on the whole to be satisfactory; there were a great number of inaccurate responses, but, generally speaking, if a man's performance in the test was poor, his record as a driver was bad. In some instances a man was placed higher in the test results than in the company's employment records, but it is suggested that certain relevant qualities had not been adequately tested. Researches are said to be in process for perfecting the test.

Another elaborate experiment was conducted in Geneva in connection with telephone operating. In this case the tests were of the laboratory order. The capacities tested were immediate memory, serial memory, attention, spatial judgment, rapidity of movement, accuracy of movement, reaction time, and manual asymmetry. The tests were conducted with great care and detail, but the number of subjects, as in many other cases cited, was too limited to make the general application of the results valid.

Perhaps the greatest number of investigations have been conducted in clerical occupations. Many of these are mainly tests of general intelligence, while some are tests of training and acquired abilities, but

the application of the results on a limited scale has in many instances proved successful. The author calls attention to the American army mental tests, which, while on the whole general intelligence tests, tended to show a different level of intelligence developed and required by different occupations. Special treatment is given in an appendix to an experiment made by Taylor, reported in his *Principles of Scientific Management* and in his *Shop Management*. It is often claimed that Taylor, in the case of certain bicycle ball inspectors, made use of vocational selection methods, and that this accounted for an increase in individual output of about 340 per cent. The author is at pains to show that in reality the change was effected through a simple motion study experiment with a stop watch and not by a laboratory reaction-time test, while a great many other factors connected with changes in hours and conditions of labour introduced at the same time also affected the result.

The report states that most of the research on the subject of vocational guidance and selection has been carried out in America, but a beginning has been made in Great Britain with the formation of the National Institute of Industrial Psychology, and further developments may be expected. This report itself is described as "a preliminary step", and further studies published by the Industrial Fatigue Research Board, which are promised, are likely to encourage progress in this fruitful field of experiment.



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### INTERNATIONAL PUBLICATIONS

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INTERNATIONAL LABOUR OFFICE: *Compensation for War Disabilities in Great Britain and the United States*; Studies and Reports, Series E, No 4. 85 pp. Geneva. 30 Dec. 1921.

This study gives a brief survey of the problems which have arisen in Great Britain and the United States in connection with compensation for war disabilities, dealing more especially with the legal basis of the right to compensation, the conditions of pensionable disability, and the assessment of disablement. There is a description of the system of compensation common to both countries, and also of the system of alternative pensions in Great Britain and of war risk insurance in the United States. There are several references to the French system of compensation. The appendices, which fill more than three-quarters of the study, contain extracts from English and American Acts, Warrants, and statistics dealing with the question.

ASSOCIATION INTERNATIONALE POUR LA PROTECTION LÉGALE DES TRAVAILLEURS: *Compte rendu de la neuvième Assemblée générale du Comité de l'Association internationale pour la protection légale des travailleurs*. (Geneva, 17 and 18 Oct. 1921.) 66 pp. Paris, Berger-Levrault. 1922.

A full report of the discussions of the ninth general meeting of the Committee of the International Association for Labour Legislation. The resolutions adopted deal with finance, collaboration with other international associations, the ratifications of the Washington Conventions, the next meeting of delegates, agricultural labour, port labour, and works councils. The pamphlet also contains a list of speakers, delegates, and members of committees. The reports of the secretary and treasurer and the text of the resolutions adopted are given in an appendix.

COMITÉ INTERNATIONAL DE SECOURS A LA RUSSIE: *Conférence sur la famine en Russie prononcée en février 1922, par le Dr Nansen*. Information No. 16. 12 pp., illustr. Geneva, Haut Commissariat du Dr Nansen, 5, passage des Lions.

Dr. Nansen first points out that the Governments of the states members of the League of Nations ought to have foreseen the terrible calamity under which Russia is now suffering. He then gives a short account of the present state of affairs in Russia and shows that not only humanitarian motives, but also economic self-interest should urge us to send help to the famine areas. He asserts that the relief sent does really reach the persons it is meant for, but that none the less the famine will probably last over next year unless immediate supplies are sent, not only of provisions, but also of the seed and tools which are required for the spring sowings.

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## OFFICIAL PUBLICATIONS

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### CANADA

MINISTRY OF TRADE AND COMMERCE: *Historical Statistical Survey of Education in Canada*. 120 pp. Ottawa. 1921.

While the Federal Government of Canada has no part in the administration of education, control of which rests entirely with the Provincial Governments, the Dominion Bureau of Statistics has undertaken to publish a series of annual reports based on a scheme of co-ordinated statistics of education approved by representative education officials in all the Provinces. This first report gives an historical survey of educational conditions by means of statistics, and lays the foundation for further investigation. The eight parts include: a summary of differences in legislation and practice as between the Provinces; statistics as to school attendance and school accommodation; a description of the various grading systems, with extensive statistical reports on the comparative results; the classification of the teachers, their experience and their salaries; statistics on secondary institutions, consolidation, and technical education; reports on the cost of education; reports on the medical inspection of schools and education of defectives; and statistics of higher education, including the universities and affiliated technical and professional colleges.

### DENMARK

STATISTIK DEPARTMENT: *Statistik Aarbog 1921*. xxiv+236 pp. Copenhagen. 1921. 2 kronen.

The publication of this, the twenty-sixth, statistical year book has been pushed forward in order to make known as soon as possible the data relating to North Schleswig, at the same time as those which refer to the rest of Denmark. The order of the contents adopted in previous year books remains the same; the only alteration is in the presentation of some of the tables. It is interesting to note that in the course of a single year the number of emigrants has almost doubled; it was 3,341 in 1919, and in 1920 it reached 6,300. The chapter devoted to social statistics includes an ample documentation.

### GERMANY

REICHsarBEITSMINISTERIUM: *Grundzüge der deutschen Sozialversicherung*. Im Auftrag des Reichsarbeitsministeriums bearbeitet von Ministerialrat Dr. SCHULZ und Referent ECKERT, unter Mitwirkung von Ministerialrat Dr. med. RIECH. 287 pp. Berlin, Reimar Hobbing. 1922.

Social insurance legislation in Germany has already undergone many attempts at revision. These have resulted in certain improvements in detail, but not in full adaptation to the changed economic and social conditions of the country; there has also been some loss of clearness. For this reason the Federal Government, in agreement with the Reichstag and the States, has had under consideration the question of a complete re-casting of the system of social insurance. The present volume is a kind of preliminary survey of the question. The authors have not tried to set out a general scheme for the proposed Bill; their purpose is to state the fundamental principles of social insurance and to indicate the lines to be followed in co-ordinating existing laws, filling up gaps, and eliminating inconsistencies and overlapping. The work consists of thirteen parts; the first, dealing with principles, provides material for forming an opinion of the general problem of social insurance. The text is arranged in columns, so that the different kinds of insurance discussed are set out clearly.

## GREECE

YPOURGEION ETHNIKES OECONOMIAS, DIEUTHUNISIS ERGASIAS KAI KOINONIKES PRONOIAS; EPITHEORESIS ERGASIAS: *Perilepsis ektheseon tou prosopikou epitheoreseos ergasias epi tes efarmoges ton ergatikon nomon kata to etos 1920*. 38 pp. Athens. 1921.

Report of the Labour Inspectorate on the application of labour legislation in Greece in 1920. A detailed analysis will be given in a subsequent number of the *Review* under the heading *Government Reports*.

## NORWAY

STATENS INSPEKTORAT FOR ARBEIDSFORMIDLINGEN, ARBEIDSLÆDIGHETSFORSIKRINGEN: *Arsberetning 1920-1921*. 62 pp. Christiania. 1922.

This report gives a detailed account of the activities of public and private employment bureaux and unemployment insurance funds. Nearly half of the report is occupied with a study of the organisation of relief works.

## SWEDEN

SVERIGES OFFICIELLA STATISTIK, SOCIALSTATISTIK: *Arbetsförhållandena för Hotell och Restaurangpersonalen i Sverige*; by K. Socialstyrelsen. 160 pp. Stockholm. 1922.

The material which forms the basis of this study of the conditions of work in hotels and restaurants was collected in 1914 and 1915, but it was afterwards completed as far as possible by information referring to conditions up to 1920.

In 1913 the Swedish Government instructed the Administrative Department of Labour and Social Insurance to conduct an enquiry into the hours and other conditions of work in hotels and restaurants, and to make such proposals as it deemed desirable. From information supplied by local authorities it appears that the hotel and restaurant industry in Sweden includes about 10,000 establishments (hotels, restaurants, cafés, automatic bars, etc.); but data could only be obtained for 3,500 of these. Table I shows the distribution of the various establishments through the country, grouping them according to their nature and importance. In table II is indicated the proportion of employees of both sexes of less than 18 years. Women account for 82 per cent. of the persons employed. The following tables give information as to the age, condition, whether married or single, and occupations of the employees.

A part of the report deals with hours of work. Figures furnished by the employees showed that in 1915 they worked on the average 89 hours per week. In about half the cases holidays were allowed. The Act of 17 October 1919 fixed the maximum hours of work at 48 per week for all work not directly concerned with the service of the public. The enquiry undertaken at the beginning of the summer of 1920 to bring the report up to date shows, however, that there has been a noticeable reduction in the hours of work even for those classes of employees to whom the Act did not apply. On the other hand, it seems that, as far as kitchen workers are concerned, the provisions of the Act are not always strictly adhered to. Since 22 June 1921 the Act no longer applies to establishments employing less than five persons.

The chapter on wages makes clear that the increase in income has been greater in the case of employees with fixed wages than for those who depend upon tips. Finally, tables XVIII to XXI supply data on the housing conditions of employees.



## UNITED STATES

DEPARTMENT OF LABOUR, BUREAU OF LABOUR STATISTICS: *Personnel Research Agencies ; a Guide to Organised Research in Employment Management, Industrial Relations, Training, and Working Conditions*; Bulletin No. 299, by J. D. THOMPSON. 207 pp. Washington, Government Printing Office. 1921.

This bulletin was prepared at the request of a conference held under the auspices of the Engineering Foundation and National Research Council, which founded the Personnel Research Federation in March 1921. It consists of a classified list of all agencies in the United States concerned with employment management, industrial relations, the placing of workers, including vocational guidance and vocational education, and industrial hygiene and safety. The agencies described are arranged in two main divisions, as (1) official agencies, Federal, State, and municipal; and as (2) non-official agencies, including associations, foundations, research bureaux and institutes; and universities and colleges. Within the group the entries are arranged alphabetically, but in order to facilitate reference the agencies are also classified according to their principal activities. In each case full details are given of the title, address, organisation, development, activities, and publications of the agency mentioned. The *Bulletin* will be a valuable work of reference for all those interested in the development of any of the subjects dealt with by the agencies listed.

## WISCONSIN

INDUSTRIAL COMMISSION OF WISCONSIN: *The Apprenticeship Law with Explanations*. 24 pp. Madison, Wisconsin, The Industrial Commission. 1921.

This pamphlet gives the text of the Wisconsin apprenticeship Act, with full explanations of each clause, the rules for its application drawn up by the Industrial Commission, and the standard form of indenture. It also includes the standard schedules of instruction to be given to apprentices in certain trades, drawn up by trade committees of employers and journeymen. The pamphlet is evidently intended for the information of employers, apprentices and their parents. The third party to every apprenticeship contract is the state, represented by the Industrial Commission, which supervises the training, settles differences between employer and apprentice, ensures adequate instruction in the part-time school, which every apprentice is bound to attend for at least five hours per week, decides whether contracts may be annulled, and enforces all indentures. Some facts and suggestions are given on the correlation of school education and apprenticeship; it is admitted, however, that only a beginning has been made in this direction.

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 NON-OFFICIAL PUBLICATIONS
 

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BRAUER, Dr. Theodor: *Die moderne Gewerkschaftsbewegung*. 80 pp. Duisburg, Echo-Verlag. 1922. 10 marks.

Dr. Brauer, who is one of the leaders of Christian trade unionism, not only describes the main lines of development of the modern trade union movement, but endeavours to bring out the ideas which are the basis of the movement, and the different principles which are leading organisations along divergent paths. In his view the Socialist position and the Christian Socialist doctrine are distinguished by a difference in their philosophic conceptions of society. One follows from the theory of the class struggle; the other takes its stand upon the idea of the craft and the corporation. The first is the individualist principle in practice; the second, on the contrary, realises the social ideal.

BRAUNS, Dr.: *Die gleitende Lohnscala*. Reichs-Arbeitsblatt, No. 4, 28 Feb. 1922. Berlin.

Dr. Brauns, the German Federal Minister of Labour, is in favour of the simultaneous adoption of sliding wage scales and the conclusion of short-period collective agreements. His proposal is that conciliation commissions, set up under the agreements, should make regular comparisons between wage rates and the index numbers of official statistics, and should propose the necessary wage adjustments. The same commissions would also settle any disputes which might arise.

CATCHINGS, Waddell: *A Way out for Labour and Capital*. 23 pp. Newton, Massachusetts, Pollak Foundation for Economic Research. Reprint from the *Atlantic Monthly*, Feb. 1922. Boston.

The first half of this pamphlet is an analysis of the aims, efforts, and methods of trade unions in the industrial struggle. The author considers the aims of both employer and employee as destructive — "the labour union struggles for power to compel action with the employer; the employer struggles for power upon his part". The solution, the author thinks, is in the so-called systems of industrial democracy, employee representation, and joint councils. Wages, hours, and working conditions should "be determined fairly as questions of fact" and in that case "there is no need of the unions". The author suggests, however, no standards or rules by which the adequacy of the wages, reasonableness of the hours, or the suitability of working conditions may be determined. He admits that there is no cure-all, but believes that "ultimately the problem will be solved—not, however, by blind struggle, but by slow, careful, deliberate, constructive joint effort".

CONFEDERAZIONE COOPERATIVA ITALIANA, CONSORZIO ITALIANO COOPERATIVE PESCATORI. *Atti ufficiali del primo Convegno Nazionale per le cooperative fra pescatori (Napoli, 30-31 luglio e 1 agosto 1920)*. 103 pp. Rome, Luigi Buffetti. 1922.

Since this first National Congress for co-operation between Italian fishermen took place, one of the principal demands which were then put forward has received satisfaction. Insurance against accidents was established by the Act of 24 March 1921, which at the same time solved the problem of granting credits to fishermen's co-operative societies.

In the preface of the report the General Secretary of the Italian Co-operative Confederation indicates with satisfaction the results obtained by the fishing industry and the direction in which it is likely to develop.

*Fédération française des Unions de Syndicats professionnels féminins*. 14 pp. Paris.

A brief sketch of the history, principles, organisation, and work of the Federation.

GROUPEMENTS INDUSTRIELS D'ALSACE ET DE LORRAINE: *Le Projet de loi gouvernemental sur les assurances sociales comparé à la législation d'assurances actuellement en vigueur en Alsace et en Lorraine*. 21 pp. 1921.

This report is issued by the Research Commission appointed by the employers' organisations of Alsace-Lorraine to study the French Government Social Insurance Bill. The broad outlines of the Bill are examined; the Commission expresses itself in favour of the maintenance of social insurance in Alsace-Lorraine; but is of opinion that while the Bill certainly shows excellent intentions, and has the value of an interesting and carefully thought out academic thesis, yet at the same time all practical considerations based on experience and facts have been entirely ignored in drafting it.

*Handbuch der Reichsversicherungsordnung.* xii + 773 pp. Vossische Buchhandlung, Verlag. 1922.

In this edition of the Social Insurance Code attention is drawn to all amendments of the earlier text by the use of special type. Where a substitution has been made, the original phrase is given in the notes, which also contain the text of the Administrative Instructions referring to the various Articles. The appendices give, classified according to their contents, the texts of all regulations, Orders, etc., relating to social insurance, which were published between 1885 and 22 November 1921.

HARKNESS, Georgia E.: *The Church and the Immigrant.* 110 pp. New York, George H. Doran Company. 1921.

This book aims at giving assistance to those who desire to help the foreign-born population in America, and is addressed particularly to members of the Protestant Church. It presents a statement on the immigration situation and suggests work that can be undertaken, particularly in arranging English and citizenship classes, the organisation of Americanisation courses, and in promoting the improvement of the immigrants' homes. It protests vigorously against the exploitation practised on the arrival of immigrants through fraudulent employment agencies, unsound banks, unscrupulous doctors, and other persons. The book contains a very useful bibliography.

HODÉE, Adolphe : *L'horticulture française et la condition des ouvriers horticulteurs.* Paris, Fédération nationale des travailleurs de l'agriculture. 23 pp. 1922.

Mr. Hodée, who is General Secretary of the National Federation of Agricultural Workers states that in France gardening is not necessarily accepted as a science. One aim of his pamphlet is to point out that the gardener should be led to understand the importance of horticulture as a profession, and his own need of technical horticultural education. It is stated that since 1914 there has been a serious decrease in the number of men who can be employed in any of the branches of horticulture, as the industry itself is declining in France. Although Mr. Hodée is of opinion that the decline of the horticultural export trade, formerly very flourishing, is due mainly to the fact that since 1914 more countries produce what they need within their own borders, he is convinced that export of plants and flowers from France may be revived if the industry is conducted on business principles and is provided with modern equipment; this, he thinks, would make it possible to improve the labour conditions of horticultural workers.

DE MADAY, André: *La Compétence de l'Organisation internationale du Travail en matière agricole.* 26 pp. Lyons, Desvigne. 1921.

Mr. de Maday's contribution to the discussion on the subject of the competence of the International Labour Organisation in regard to agriculture takes the form of an exhaustive examination of all the sources from which indications of the intentions of the framers of the Labour Part of the Treaties of Peace may be obtained. He examines the original British draft, the minutes of the discussions of the International Commission on Labour Legislation which was created by the Peace Conference for the purpose of devising the labour clauses to be inserted in the treaties, and of those plenary sittings of the Conference itself during which the report submitted by the International Commission was considered. By citation from these sources he meets point by point the arguments of the supporters of the theory of non-competence, and concludes that "the International Labour Organisation established by the Treaties of Peace is competent to undertake the regulation of agricultural labour".

MARTIN, Edith How : *The Methods of Appointment of Administrative and Clerical Staffs in the Local Government Service of England and Wales*. Economica, January 1922, No. 4, pp. 51-68. London, Fisher Unwin.

Mrs. How Martin presents here the result of her enquiries into the methods of recruitment for, and the standard of qualifications demanded from, entrants to the general administrative and clerical branches of the Local Government Service. The author pleads that equal training and equal opportunities of acquiring recognised qualifications should be secured to members of the administrative and clerical staffs, since "scientific administration is as important and fundamental to the Service as a knowledge of medicine is to the medical officer of health or of law to the town clerk".

NATIONAL ASSOCIATION OF MANUFACTURERS: *Open Shop Encyclopedia; a Reference Book for the Use of Teachers, Students, and Public Speakers*. 248 pp. New York. 1921.

This handbook is a compilation of facts and arguments tending to discredit the 'closed shop' principle in industry. The principle is opposed from the point of view of the employer, the unorganised worker, and the public. Trade union utterances, economists' views, evidence before the Industrial Relations Commission, etc. are quoted to support the arguments, and make up most of the matter. The chief objects of attack are the monopolistic tendencies of trade unions and their policy of limitation of output, resulting respectively in injustice to unorganised labour and in inefficient production. Statements are given of the comparative outputs of 'closed shops' and 'open shops'. Protest is made against the irresponsibility of trade unions in the matter of keeping to agreements, and also against their claim to represent the real wishes and interests of their members.

NELKEN, Margarita : *La condición de la mujer en España ; Su estado actual, su posible desarrollo*. 280 pp. Barcelona, Editorial Minerva.

The economic aspect of feminism is of immediate importance in Spain. The number of women who must earn their living is increasing, but opportunities for doing so are not available except at an insufficient wage. If men wish to put an end to ruinous competition with ill-paid women workers, they must assist the latter to organise and together enforce the principle of equal pay for equal work. The entry of women into the professions is hindered not only by public opinion but also by the lack of schools which prepare girls for university study ; nevertheless, there are a growing number of women students in the universities.

PAPADEMETRIO, Solon : *Stoikheia tou hellenikou dikaiou*. 347 pp. Athens, Nomike Press. 1921.

The author, who is an official of the Mines Department of the National Ministry of Economics in Greece, studies the historical development of Greek mining law and the principles upon which it is based today. One chapter deals with mining labour legislation. A second volume, which will appear shortly, will bring together all the mining legislation now in force.

PICARD, Roger : *Le Contrôle ouvrier sur la gestion des entreprises*. 286 pp. Paris, Marcel Rivière. 1922.

Mr. Picard's book gives a clear account of the various schemes for workers' control which have recently been under discussion in France and in Italy. He gives an analysis, first of the laws on the subject in various countries, including France, England, Russia, Germany, Norway, Austria, Luxembourg, and Czechoslovakia, and then of the systems due to private initiative in France, Italy, Belgium, Switzerland, Canada, and the United States. The

author finds that the common idea underlying and unifying all these attempts is that both in the factory and in economic theory absolute authority and the sovereignty of divine right have had their day, and that the governed have the right, if not to share in the government, at least to demand an account of their actions from those who do. He considers that workers' control offers many advantages to the employer as well as to the worker. He is in favour of the institution in France of a system of control on the lines of the Whitley councils in England, which should be compulsory for certain specified industries and for works of a certain importance.

Rowe, J. W. F.: *The Ball Warpers; the Policy of their Unions and its Results*. Economica, Jan. 1922; pp. 69-74. London, Fisher Unwin.

This article contains a brief study of the history of ball warpers' wages and shows that, as a result of the introduction and competition of new and cheaper processes, these wages failed to increase in proportion to the average earnings of other grades of cotton operatives. The author attributes the introduction of these new processes to "the exclusive and independent policy of the warpers' unions", but is of opinion, nevertheless, that, from the point of view of wage rates, as distinct from earnings, the union policy must be regarded as beneficial.

UMBREIT, Paul: *Zur Lage der arbeitenden Klasse in Deutschland*. Correspondenzblatt des Allgemeinen Deutschen Gewerkschaftsbundes, Nos. 9 and 10, 4 and 11 March 1922. Berlin.

A comparison based on official statistics of wage rates and cost of living in 1913, 1920, and 1921.

UNION CENTRALE DES ASSOCIATIONS PATRONALES SUISSES: *Rapport du Comité central sur l'activité de l'union durant l'année 1921*. 75 pp. Zurich, Arnold Bopp. July 1921.

The report, after recalling the constitution and aims of the Central Federation of Swiss employers' associations, proceeds to sum up the work of the delegates' meeting and of the executive committee, and then gives a short account of the second and third congresses of Swiss industry and commerce. It presents the point of view of the Federation on regulation of hours and other labour conditions. After pointing out that the collective agreement with the Federation of Unions of Salaried Employees ceased to be in force after 1 January 1921, the report examines at considerable length relief for the unemployed, the housing difficulty, the surplus of workers, strikes, and lock-outs. The last chapter is devoted to the International Labour Organisation: it describes the work accomplished by the International Labour Office from its foundation till July 1921, laying stress on those measures taken by the Office in which the Central Federation was interested. Two tables are given containing statistics relating to labour disputes.

UNITED MINE WORKERS OF AMERICA: *Proceedings of the Twenty-eighth Consecutive and Fifth Biennial Convention*. 3 vols. 1679 pp. Indianapolis, Bookwalter-Ball-Greathouse Printing Co.

The Convention was held at Indianapolis from 20 September to 5 October 1921, and its proceedings have been noted in a previous number of the *Review* (?). The shorthand report of the proceedings fills the first two volumes, the third being occupied by the resolutions presented in the course of the Convention.

VENNBERG, Erik: *Arbetstiden i Gruvor och vissa därmed sammanhängande Förhållanden*. 92 pp. Stockholm, Isaac Marcus, Boktryckery-Aktiebolag. 1921.

This report was drawn up at the request of the experts appointed on 17 October 1919 by the Swedish Minister of the Interior to conduct an enquiry on the reduction of hours of work in mining. It is the first detailed study of the question and completes the reports drawn up in 1911 by the Bureau of Social Statistics on hours of work in large and small scale industry. It consists of two parts: the first, which appeared in outline in a preliminary report issued in 1918, deals with iron mines, the second with coal mines. A dozen tables will help the reader to get a clear idea of the subject.

VOLLBRECHT, Dr. W.: *Utopische und mögliche "gleitende Skalen"*. *Soziale Praxis und Archiv für Volkswohlfart*, No. 10, 8 March 1922. Berlin.

A theoretical discussion of the problem of sliding wage scales and an explanation of various methods, in particular of those published by Mr. Zeiler in the *Reichs-Arbeitsblatt*. The author is of opinion that with certain restrictions the sliding scale system might be applied to the salaries of civil servants.

WEISS, Feri Felix: *The Sieve, or Revelations of the Man Mill, being the Truth about American Immigration*. 307 pp. Boston, The Page Co. 1921.

Under this title Mr. F. F. Weiss offers to the public a series of anecdotes drawn from his experience as an inspector of immigration at Boston and New York, together with some reflexions on the effects of immigration upon the social life of the United States. After giving a clear idea of the working of the American immigration services and of the operation of the United States immigration laws, the author pronounces himself in favour of a policy of Americanisation and of rigorous restriction of immigration.

*Wirtschaftliches Arbeitnehmerjahrbuch*. Band II. 256 pp. Stuttgart, Volkswirtschaftlicher Verlag für Wirtschaft und Verkehr. 1922.

The first volume of this publication appeared in 1921 under the title of *Wirtschaftliches Arbeitnehmertaschenbuch* (Workers' Economic Manual)<sup>(1)</sup>. The second volume deals chiefly with fiscal and labour legislation, social insurance, and economy, both political and domestic. It contains also some chapters on the organisation of private firms, banks, stock and other exchanges, as well as on finance in general.

WORKERS' EDUCATION BUREAU OF AMERICA: *Workers' Education in the United States; Report of Proceedings of the First National Conference on Workers' Education in the United States, 2 to 3 April 1921*. 144 pp. New York City, Workers' Education Bureau of America. 1921. 50 cents.

At the conference reported in this volume some twenty-six organisations concerned with workers' education were represented. The first session was occupied with reports on the work of different organisations, varying from long established and highly organised enterprises, like the educational department of the International Ladies' Garment Workers' Union or the Rand School of Social Science, to small groups still struggling to overcome their initial difficulties. Subsequent sessions dealt with the attitude of organised labour to workers' education and the problems of the student and the teacher. An appendix gives the substance of the replies received to a questionnaire issued in preparation for the conference, and the constitution, aims, and programme of the Workers' Education Bureau established as a result of the conference.

<sup>(1)</sup> *International Labour Review*, Vol. IV, No. 3, Dec. 1921, p. 603.

The book as a whole affords an interesting survey of the development and present condition of workers' education in the United States. It shows that the whole movement for adult education is of very recent origin in America. Of the organisations replying to the questionnaire only four were in existence before 1918, while thirteen were founded during 1920. The report affords material for comparative study of organisation, curricula, teaching methods, finance, and control.

The Workers' Education Bureau is intended to act as a clearing-house of information, a centre for the registration of teachers in adult education, and a centre for publicity and propaganda. It is at present in the stage of experiment, of which time alone will prove the value; but as a measure of co-ordination of effort it marks an important step forward in the movement for workers' education in the United States.

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## Recent Literature on Industrial Hygiene

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THE Industrial Hygiene Service of the International Labour Office is proposing to publish, in addition to the information incorporated in the form of *Book Notes* at the end of the *International Labour Review*, periodical bibliographies of the literature of industrial hygiene. Such bibliographies cannot be entirely complete, but the more important reviews and periodicals of the medical and industrial press will come under survey. The present bibliography lists books appearing in 1921 and periodical articles published during January and February 1922 <sup>(1)</sup>.

### GENERAL

#### *Conditions due to External Factors*

- (1) GLIBERT, D. J. : *Influence of Industrial Noises*. Journ. of Ind. Hyg., Jan. 1922, No. 9, p. 264. Boston.

#### *Factory Inspection*

- (2) WINSLOW, C.-E. A. : *A useful Factory Inspection Form*. United States Public Health Reports, 6 Jan. 1922.

### HYGIENE AND HEALTH IN TRADES AND OCCUPATIONS

#### *Mining*

- (3) COLLIS, Edgar L. : *Health and Welfare in the Coal Mining Industry*. Journ. of State Medicine, Jan. 1922, No. 1. London.
- (4) SAYERS, R. R. and SURGEON, P. A. : *Prevention of Illness among Miners*. United States Department of the Interior, Bureau of Mines, Reports of Investigations, Serial No. 2319, Feb. 1922. Washington, Government Printing Office.

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<sup>(1)</sup> The Industrial Hygiene Service would be greatly obliged if all experts engaged in the work of industrial hygiene and industrial medicine would send, addressed to the *Industrial Hygiene Service at the International Labour Office, Geneva*, full notices of any published work immediately on publication, or, if possible, a copy; the Service will be happy to forward to its correspondents copies of the Industrial Hygiene Bibliographies.

*Metallurgical and Engineering Industries*

(5) *Welfare of Workers in Factories and Workshops in which (1) the Manufacture of Hollow Ware, or (2) the Process of Galvanising, other than the Galvanising of Wire, is carried on.* Great Britain, Home Office. London. 1922. (Typescript.)

[See also Nos. (53), (58), and (61).]

*Textile and Clothing Industries*

(6) *L'apparecchio oscillante Kestner e Neu per la pulitura della carde da cotone.* La Sicurezza e l'Igiene nell' Industria, Jan. 1922, No. 1. Milan.

*Chemical Industries*

(7) *Industrial Uses of Micro-organisms.* Brit. Med. Journ., Jan. 1922, p. 115. London.

*Public Utility Services, Transport, Aviation*

(8) *Tests for Colour Blindness in Seamen.* Ibid., p. 155.

[See also No. (69).]

(9) BAYEUX : *Injectons d'oxygène et leur utilisation chez les passagers en avion.* Paper read at the First Internat. Congress on Aerial Navigation. La Presse Médicale, 7 Jan. 1922. Paris.

(10) BEYNE : *Organisation actuelle dans l'armée du service des examens d'aptitude physique à la navigation aérienne.* Ibid.

(11) BRABANT, V. G. : *Projet de codification internationale des examens médicaux des pilotes.* Ibid.

(12) CANTONNET, M. A. : *Méthodes d'examen de la vision chez les pilotes-aviateurs.* Ibid.

(13) CRUCHET, M. R. : *Mal des aviateurs.* Ibid.

(14) FERRY, Georges : *Les facteurs 'émotivité' et 'irritabilité' chez l'aviateur suivant son état d'entraînement.* Paper read at the Acad. de Méd., 7 Feb. 1922. La Presse Médicale, 7 Jan. and 11 Feb. 1922. Paris.

(15) FOY : *Méthodes d'examen de l'oreille chez les pilotes-aviateurs.* Paper read at the First Internat. Congress on Aerial Navigation. La Presse Médicale, 7 Jan. 1922. Paris.

(16) PERRIN DE BRICHAMBAUT : *Facteur 'émotivité' chez le pilote-aviateur.* Ibid.

(17) PORTMANN : *Interprétation des épreuves labyrinthiques chez les aviateurs.* Ibid.

(18) MAZZONE, Fed. : *Malattie e infortuni del personale telefonico.* Il Lavoro, Jan. 1922, No. 1. Milan.

[See also Nos. (26), (44), and (72).]

*Printing Trades*

(19) GERBER, Paul : *Die Phthise im Buchdruckergewerbe.* Wien. Klin. Wochenschr., 16 Feb. 1922, No. 7. Vienna.

(20) ROOS, C. B. : *Dust in Printers' Workrooms.* Journ. of Ind. Hyg., Jan. 1922, No. 9, p. 257. Boston.

[See also No. (23).]



## HYGIENE AND HEALTH OF THE WORKER

*Vocational Guidance and Selection*

(21) COBB, Stanley : *A Report on the brief Neuro-psychiatric Examination of 1,444 Students*. Journ. of Ind. Hyg., Feb. 1922, No. 10, p. 309. Boston.

(22) FONTÈGNE, Julien : *Le choix d'un métier et les aptitudes physiques*. 45 pp. Paris, Ravisse. 1922.

(23) MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD : *Three Studies in Vocational Selection*, being Report No. 16 ; 32 pp.; containing (1) FARMER, E. : *Physical Measurements in a Confectionery Factory* ; (2) MUSCIO, B. : *The Psycho-physiological Capacities required by the Hand Compositor* ; (3) MUSCIO, B. and EYRE, A. B. B. : *The Measurement of Physical Strength with reference to Vocational Guidance*. London, H. M. Stationery Office. 1922.

(24) *Vocational Selection in Industry*. Brit. Med. Journ., 18 Feb. 1922. London.

[See also Nos. (8), (12), and (42).]

*Scientific Management*

(25) DURIG, A. : *Das Taylorsystem und die Medizin*. Wien. Med. Wochenschr., Nos. 1, 2, 4, 5, 7, 8, 1922. Vienna.

[See also Nos. (37), (38), and (39).]

*Personal Hygiene*

(26) SMYTH, J. L. : *Ship's Plumbing and Sanitation*. Journ. of Royal Sanit. Inst., Jan. 1922, No. 4. London.

*Medical Care and Assistance*

(27) RECTOR, Frank L. : *Iodin as a Wound Disinfectant ; Results of an Investigation by the Conference Board of Physicians in Industry*. The Nation's Health, Jan. 1922. Chicago.

(28) RENON, Louis : *L'alliance de l'hygiène et de la pathologie dans la médecine préventive d'examen sanitaire régulier et systématique*. Ann. d'Hyg. publ., Jan. 1922, p. 30. Paris.

*Welfare*

(29) McILROY, A. Louise : *The Problem of the Working Mother*. Journ. of State Med., Feb. 1922, No. 2. London.

(30) KELLOGG, S. : *The Rehabilitation of Employees ; an Experience with 1,240 Cases*. Journ. of Ind. Hyg., Jan. 1922, No. 9. Boston.

(31) *Maternity and Child Welfare*. Great Britain, Ministry of Health, Form M. and C. W. (H). 1922.

(32) MEREDITH, Florence : *Medical Training for Social Workers*. The Nation's Health, Jan. 1922. Chicago.

(33) TURNER, C. E. : *Motion Pictures as used in Health Education*. Ibid.

[See also Nos. (3), and (5).]

## INDUSTRIAL PHYSIOLOGY AND PATHOLOGY

*General*

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