



# INDUSTRIAL RELATIONS

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## Trade Union Organisations

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**T**HE outstanding event in the trade union movement during the month of April was the Congress of the International Federation of Trade Unions at Rome, which, together with its preliminary meeting at Genoa, is fully reported in the preceding article of this issue. The Christian trade unions, through their international organisation, and the Swiss trade unions, at the invitation of their government, defined their attitude towards the Genoa Conference.

In Belgium the Central Organisation of Miners adopted in March resolutions on many of the most important subjects of industrial controversy, including one on the reduction of wages and the cost of living.

Reorganisation of the trade union movement is under consideration in Norway and Spain, and more complete information is available on the present state of trade unionism in Poland.

### INTERNATIONAL ORGANISATIONS

The Executive of the International Confederation of Christian Trade Unions met at Frankfort-on-Main on the 4, 5, and 6 April to prepare the agenda for the Second International Congress which will be held at Innsbruck on 21, 22, and 23 June 1922. The congress is to discuss the programme of world economic policy, which has been drafted by the Executive and will shortly be published. The Executive will also submit proposals for the publication of an international review. With regard to the request of the Confederation that international workers' organisations should be represented at the Genoa Conference <sup>(1)</sup>, the Italian Government replied that it was not possible to invite international organisations, but that their interests could be attended to by members of affiliated organisations who might be present. As the Confederation had demanded, the Governments of Germany, Belgium, and Italy each included in their delegations a representative of the Christian trade union movement. The Executive passed the following resolution, which was communicated to the Genoa Conference.

The Executive of the International Confederation of Christian Unions at its meeting at Frankfort on 6 April finds that the well-being of society and, in particular, of the working classes is seriously threatened by the present economic confusion, resulting in fluctuation in exchanges and prices, instability of markets, and difficulties in the exchange of goods; that the restoration of normal economic conditions can only be achieved by a general effort for the reconstruction of Europe; that to reach this goal it is necessary

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(1) *International Labour Review*, Vol. V, No. 4, Apr. 1922, p. 593.

to aim at the establishment of international economic agreements between the governments who are alone responsible and competent for concluding and applying such agreements. Finding, however, that such economic agreements must have a marked effect on the social conditions of the workers, and that it is impossible to achieve an economic reconstruction of Europe without at the same time securing social peace by establishing a just balance between all economic forces, and by respecting the rights and enforcing the duties of all the factors in production, it requests :

(1) that in the study and conclusion of agreements the governments meeting at Genoa be actuated by principles of justice and Christian charity ;

(2) that they endeavour, in particular, to take the necessary measures to increase and establish an equilibrium between the purchasing powers of the various peoples by the stabilisation of the exchanges ;

(3) that their agreements should in no way interfere, directly or indirectly, with the justly acquired rights of the workers, particularly those laid down at the founding of the International Labour Organisation in Part XIII of the Treaty of Versailles ;

(4) that in the study and application of these agreements, the governments refer to the authorised representatives of the various workers' organisations.

#### NATIONAL ORGANISATIONS

##### Switzerland

The Federal Department of Public Economy has invited economic organisations to give their views on the programme of the Genoa Conference. The Committee of the Swiss Federation of Trade Unions has set forth its observations in a letter of 15 March addressed to the Department. The letter opens with the emphatic affirmation that normal economic conditions can only be restored by the co-operation of all countries without exception, and, after quoting the resolution on unemployment adopted at the Third International Labour Conference at Geneva, it proceeds to express satisfaction that the principle embodied therein, namely, that an international crisis can be settled effectively only by international means, is to be realised at Genoa. There follow a number of suggestions offered by the Committee. It asks the representatives of Switzerland to bring forward and support at Genoa all proposals likely to remedy the present economic distress, even if their operation would involve modification of existing treaties. It considers that international economic measures must be supplemented by complete disarmament, if European peace is to rest on a solid foundation. It regards the floating of an international loan for the reconstitution of credit as indispensable. This involves the questions of reparations and the economic reconstruction of Russia, as well as the cancellation by the Allies of their reciprocal indebtedness. The Committee recommends, as a step to the creation of a United States of Europe, the establishment of a customs union embracing all Europe, thus effecting economy in the exchange of goods and facilitating the stabilisation of monetary exchanges and the equitable distribution of raw materials. Finally, it demands that the purchasing power in the hands of the workers should be increased, providing a natural outlet for overproduction and raising the standard of living. The 8-hour day should be guaranteed, for it is a conquest, obtained at the cost of enormous sacrifices, which the working class will never give up. The Committee concludes in the following terms : " In short, we consider that there are three fundamental questions which it is absolutely essential to discuss : the problem of reparations, disarmament, and the resumption of commercial relations

with Russia, and we would again draw your attention to the resolutions adopted at Frankfort concerning the economic reconstruction of Europe."

The Swiss Federation of Christian Trade Unions has likewise stated its views as to the policy which should be pursued at Genoa in a letter of 20 March to the same Federal Department. Statistics are adduced to show that the economic depression in Switzerland is due to inequality of currencies, prices, and standards of living. Remedies are then proposed in detail for these unhealthy conditions, e.g. an international credit institution, cessation of state interference with prices, equitable distribution of raw material, "the guarantee of a certain minimum real wage in all states as the indispensable complement of the international protection of workers", and international action for systematic emigration.

## Belgium

A congress of the Central Organisation of Miners (*Centrale des Mineurs*) took place from 18 to 20 March 1922 at Brussels, Mr. Dejardin, the President of the Organisation, presiding. Two hundred and sixty delegates were present.

The following was the chief resolution adopted.

### Wages

The Congress of Miners, held at Brussels on 18, 19, and 20 March 1922, having examined the situation from the point of view of the cost of living, wages, and national and international coal markets :

(1) as regards the cost of living, considering that it is just and reasonable that wages should follow the cost of living, and not precede it :

calls attention to the desire frequently expressed by the miners to see the authorities take every step capable of reducing the cost of food, and declares that the miners would be willing to see their wages reduced corresponding to a reduction in the cost of living ;

(2) with regard to wages and the coal market, considering that the wages agreement was the result of many years of agitation, that it has adopted the just and humane principle of a decent living wage, that in recent times, when both prosperity and depression have been experienced, the workers have loyally observed the convention, that wages have followed the cost of living and not preceded it, thus allowing the normal working of the coal industry ;

considering, further that the employers, after showing the desire to denounce the agreement, have by a majority announced their approval of its continuance in force, subject to certain modifications for the readjustment of wages ;

and examining the reasons put forward by the employers in favour of this view, which may be summarised as follows :

(a) wages have shown a tendency to rise ;

(b) the need to meet foreign competition ;

(c) the unsatisfactory position of certain mines which may lead to their being closed down :

the congress asserts above all its desire to maintain the wages agreement, and while recognising that wages have undergone a certain change which could be cancelled without affecting the principles of equity contained in this agreement, expresses the opinion that such readjustment should take place by degrees, beginning with the higher wages ;

further, considering that the mines as a whole have realised substantial profits, but that enquiry shows that the cost of production of certain of them is at present so high that they are placed at a disadvantage with respect to their competitors, although this situation is due to natural causes, and cannot be ascribed to any one :

therefore holds that if the necessities of the market so demand, a sacrifice of profits should first be made ;

after which the miners declare themselves prepared to make the sacrifices needed under present conditions, provided that the employers do not profit thereby ;

that otherwise, and taking the situation as a whole, wage reductions that have been made independent of the agreement should be made good.

This resolution was adopted with three dissentient votes.

### *Workers' Control*

The congress urged all its members to stress the importance of workers' control in industry through their local and district meetings and through their press, and further instructed its delegates on the executive of the Trade Union Committee to follow all action taken by the latter body with attention, with a view to pressing for the completion of proposals within a reasonable period (making due allowance for the economic situation), and to putting them in front of the public.

### *Nationalisation of Mines and Quarries*

On the nationalisation of mines and other similar property the congress adopted a resolution (with one dissentient voice) which was a reconsideration of that adopted on 14 March 1921. In the new resolution the congress declares its opinion that state administration must precede a complete taking over of the mining concessions of the country, and, further, that the miners' national executive should undertake an active campaign for popularising this principle ; the congress finally urged comrades, deputies, and senators belonging to the Central Organisation of Miners to come to an agreement with the Socialist groups in the two Chambers for the introduction of a Bill " whenever they consider that a suitable moment has come ".

The congress further authorised its national committee to subscribe 5,000 francs towards the compulsory loan which has recently been issued by the Board of Directors of the Aura Company, which exploits the Angevin quarries purchased by the French Miners' Federation for the purpose of making an experiment in nationalisation.

In regard to miners' pensions the claims of the congress were a pension of 1,500 francs at the age of 55, and at 50 years for miners incapable of further work, and the maintenance of the pension of 720 francs for the widows of miners. It also demanded that the employment of pensioned invalid miners on light work should be allowed, as is already the case for officials ; and charged the mining deputies in Parliament to introduce a Bill based on these principles, and to make the necessary efforts to secure the passing of such a Bill within the shortest possible time.

### *Sickness Benefit*

The congress declared in favour of supporting sickness benefit by paying a fixed percentage of earnings. They considered, on the other hand, that a relief organisation should be established, either for each mining district or for each mine, with a medical service permitting of a free choice of physician, the whole system subject to uniform regulations laying down the obligations undertaken by each party.

The congress decided to instruct the Miners' National Committee to draw up a special Bill for this purpose.

### *Contracting Out*

The congress instructed the delegates to the Joint National Mining Commission to demand as soon as possible the suppression of all contracting out in mining. It urged the workers not to accept work under employers who offer them high wages without any consideration for the danger to which they are exposed.

### **Norway**

A detailed scheme for the reorganisation of the Norwegian trade union movement on a local basis has recently been drawn up by the committee which was appointed to examine the question by the Congress of the Norwegian Confederation of Labour held in 1920. The scheme is now being submitted to the various national trade unions for consideration, and the matter will be finally settled at a congress to be held in 1923. Two alternative proposals for reorganisation were made, both of which show a marked tendency towards industrial unionism; the first, which was supported by the majority in the committee, and which bears the evidence of compromise, is briefly as follows.

The existing local trade unions as well as the shop clubs (*Verkstedklub*) would be maintained and would be combined in local trade union councils (*Samorganisation*). Provision is, however, made for an application of the principle of industrial unionism by forming in every district local industrial groups of trade unions belonging to one industry. These local industrial groups would in turn form national industrial groups within the Confederation. The national industrial groups will succeed the present national trade unions (*Forbund*), but as they will have no duties in financial administration, their function being rather to act as advisory bodies to the Confederation on technical questions, their importance would seem to be decidedly less than that of the present national trade unions. Many of the functions now assigned to the national trade unions would be transferred to the Confederation, the importance of which would be very much enhanced. Thus the property and the various benefit funds of the present national unions would be taken over by the Confederation. The latter would also take an active part in all disputes at home other than purely local ones. Its administrative functions would naturally be very much increased. Among other things a special statistical section would be established, as well as a social section for collecting and distributing information concerning social and labour conditions at home and abroad.

In the second scheme of reorganisation, put forward by the minority, the principle of industrial unionism is even more strongly emphasised. It advocates the dissolution not only of the national trade union federations, but also of the local trade unions. The unit of organisation would be the shop clubs, which would combine to form a local council in each district, these local councils in turn being organised in a Confederation. Provisions similar to those contained in the first scheme are made for the formation of industrial groups within these bodies.

### **Poland**

The year 1921 was a transition period for the Polish trade unions. Formerly the activities of the unions were somewhat unsystematic, but in 1921 they developed considerably and devoted themselves principally to the solution of problems of internal organisation. Generally speaking, Polish unions have shown a tendency to organisation on an industrial

basis. However, the skilled workers appear at present desirous of abandoning this method and to prefer unions organised on a strictly craft basis.

In the Polish trade union movement there are three distinct tendencies :

(a) The *National Socialist tendency* is represented by the Polish Federation of Trade Unions. This organisation includes two old central organisations, the Polish Federation of Trade Unions and a similar organisation of former Congress Poland, known as the Polish Trade Unions, which amalgamated towards the end of October 1921 <sup>(2)</sup> on the occasion of the Posen Congress and which comprise unions in Posen, Pomerania, Upper Silesia, the old Congress Kingdom, and the old Galicia. Politically, the Polish Federation of Trade Unions is attached to the National Labour Party, whose programme includes gradual economic and social reforms.

(b) The *Socialist tendency* is represented by the Federation of Polish Workers, to which the Federation of Jewish Socialist Unions definitely adhered towards the end of 1921. The unions affiliated to this organisation belong for the most part to the old Congress Kingdom and Galicia. They are, as a rule, organised on an industrial basis.

(c) The *Christian Social tendency* is represented by the Central Commission of Christian Trade Unions, which includes two regional organisations in Cracow and Warsaw, and Christian unions in Vilna, Posen, Pomerania, etc. This organisation, which was set up very recently, supports the social programme of the National Christian Labour Party.

The Minister of Labour and Social Welfare has recently compiled statistics of the organised workers belonging to the three Polish central trade union organisations. The figures published do not include civil servants, members of the public forces and non-manual workers, except postal, telegraph, and telephone employees and railway employees, these being undertakings of an industrial character. The figures were

MEMBERSHIP OF THE CHIEF POLISH TRADE UNION ORGANISATIONS  
(Third quarter 1921)

Chief industries	Polish Federation of Trade Unions	Per cent. of total membership	Federation of Polish workers	Per cent. of total membership	Central Commission of Christian Trade Unions	Per cent. of total membership
Agriculture	210,788	44.4	96,000	24.0	29,230	18.5
Mines	14,000	3.0	30,624	7.6	4,920	3.1
Metal	24,000	5.1	31,960	8.0	12,725	8.1
Textile	79,235	16.7	44,627	11.1	16,390	10.4
Building	28,551	6.0	9,403	2.3	8,125	5.2
Post, Telegraph, and Telephone	28,640	6.0	99,156	24.7	6,286	4.0
Hotels	7,038	1.5	10,223	2.6	37,305	23.7
Total membership	474,548 <sup>(1)</sup>		400,850 <sup>(2)</sup>		157,587 <sup>(3)</sup>	

(1) Not including 250,395 Polish workers, chiefly miners in Upper Silesia and Westphalia, i.e. both in Polish and German territory.

(2) Not including 60,000 Polish workers in Upper Silesia.

(3) Includes 8,070 Polish workers in Vilna.

supplied exclusively by the trade unions concerned. In many instances the figures are only approximate.

## Spain

During the last three years the various tendencies in the trade union organisations of Catalonia have reacted on the social life of the whole country. In 1916 the most influential members of the National Confederation of Labour (*Confederación Nacional del Trabajo*) decided to attempt the grouping of trade unions by industries (*sindicatos unicos*). The Confederation was, however, dissolved in 1919 by the authorities. The influence of the "Free Unions" affiliated to the General Union of Workers (*Union General de Trabajadores*) increased. The struggle between these two important groups was sometimes so intense that the Government and the employers recognised the need for placing workers' organisations on a more stable basis by enacting legislation providing for compulsory organisation (*sindicacion forzosa*).

As a result of an open enquiry held on this subject, the views of a number of well known persons and of the chief organisations of workers and employers have been published by *El Liberal* of Madrid and *La Tribuna* of Barcelona. Almost all, with the exception of the National Confederation of Labour, have shown themselves in favour of the proposal, although in different degrees.

The Employers' Federation of Catalonia considers that, while the usefulness of compulsory industrial organisations cannot be doubted, it would, however, be desirable that the grouping by industry should be strictly carried out, and that each industry should be represented by two associations only, one of employers and one of workers. The General Union of Workers is willing to accept compulsory organisation, provided that the Act is sufficiently elastic to allow all unions to make use of it, whatever their tendency, and that it provides for the creation of joint committees of employers and employed. Mr. Alfonso Sala, employers' delegate to the Washington International Labour Conference, supports industrial organisation, but considers that it should remain voluntary in character. He holds that otherwise the sympathy and support of the workers could not be secured. The National Confederation of Labour, which before its dissolution represented 300,000 workers, has published a manifesto pointing out that the principles of its organisation are irreconcilable with the principles of compulsory industrial organisation.

At Barcelona, on 23 February 1922, a meeting was held of 52 presidents and delegates of unions representing 160,000 workers for the purpose of examining the proposed Bill on compulsory organisation. Among the resolutions carried by the meeting were the following :

Only workers may belong to a trade union.

In order that the decisions of the general meeting of a union shall be valid, at least two-thirds of the members shall be present.

The executive committee shall be elected by secret ballot in the presence of a Government representative.

The executive committee shall have full right of representation of all the members of the union, and shall be responsible for all collective agreements.

The present law on strikes shall remain in force <sup>(2)</sup>.

Trade unions must set apart a minimum of 25 per cent. of contributions to form a money guarantee of the fulfilment of agreements.

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<sup>(2)</sup> Editorial Note. The main provision of the law is that no strike may be declared without giving twenty-four hours' notice to the public authorities.

Each union shall elect representatives, in proportion to its membership, to the workers' group, which, with the employers' group, will constitute a joint committee.

The Christian trade union movement in Spain is of comparatively recent date, but has been developing steadily for the last ten years. The review *Accion Catolica de la Mujer* (Women's Catholic Movement) states that at the end of 1921 there were in existence 96 women's Christian trade unions with a total membership of 19,605. These unions have created various auxiliary organisations which have proved of value, e.g. 23 mutual benefit societies, 14 co-operative societies, 27 courses of vocational instruction, 10 marriage endowment societies, a number of loan funds, libraries, and holiday colonies. There are 28 unions in Valencia, 23 in the Basque provinces, 8 in Madrid, and 7 in Palma (Majorca). The unions have obtained for their members reductions in working hours and wage increases, particularly in the case of home workers. Very great efforts have been made to unite Catholic women on a definitely trade union basis.

### Germany

The following information on the trade union press and trade union education is reproduced from an article by Mr. Alexander Knoll, Secretary of the General Confederation of German Trade Unions, which appeared in the *International Trade Union Movement* for January/February 1922.

The trade union press has developed with the growth of trade unions themselves. Practically every trade union organisation has founded a journal of its own, the cost of which is covered by the trade union funds. The number of German trade unions issuing a journal increased from 45 in 1890 to 66 in 1906; since that date the figure has remained practically unchanged. In 1919 the German trade union press had a total circulation of 7,476,150. The metal workers' journal had the largest circulation of any single journal, namely, 1,533,100.

In addition to their official organs, a certain number of unions publish journals dealing with special subjects. In 1919 there were sixteen special organs of this kind. The woodworkers' union alone publishes three such journals, namely, a technical journal for woodworkers (*Fachblatt für Holzarbeiter*), a journal for women members of the union, and a journal for apprentices. The metal workers' union publishes an organ of its own for the works councils in the metal industry. Special journals for apprentices are issued by several other unions. Reference should also be made to the annual reports, year books, statistical articles, monographs, historical articles, etc. published by the trade unions, the majority of which are the work of leading trade unionists.

The General Federation of German Trade Unions has published its official journal *Korrespondenzblatt* since 1892, and the trade union women's journal, *Gewerkschaftliche Frauenzeitung*, since 1915. A works councils' journal, *Betriebsrätezeitung*, was first published in 1921, and for some time past a "news letter" (*Mitteilungsblatt*) has been appearing for the use of district committees of the General Federation of Trade Unions.

Trade union education also developed as it became necessary to make provision for the training of trade union leaders. In 1906 courses were organised for the benefit of trade union leaders, secretaries, etc. Such courses of trade union instruction have subsequently been instituted almost everywhere and their original programme has been considerably



enlarged. In many places classes have been organised for labour secretaries and for members of works councils.

The Trades Council of Frankfort has drawn up the following syllabus for its works councils' classes :—

- Introduction to social economy, two lectures.
- Nature and functions of industrial enterprise, one lecture.
- The function of capital in industrial enterprise, two lectures.
- Rates of exchange, one lecture.
- The question of housing in connection with industrial enterprise, one lecture.
- Book-keeping and accountancy, five lectures.
- Coal, one lecture.
- Commerce, two lectures.
- Costing and statistics in industrial enterprise, one lecture.
- Patent law and trade marks, one lecture.
- Industrial enterprise and its place in economic life, one lecture.

The Economic Institute (*Staatswissenschaftliches Institut*) of the University of Münster, Westphalia, has organised special courses, lasting for six weeks on an average, for trade union officials, who in turn are to act as teachers in connection with the works councils classes. A labour university has also been founded at Frankfort; it has at present 75 students.

## Denmark

In the *International Trade Union Movement* for January/February 1922 there appears an article on the educational work of Danish trade unions. The Labour party and the trade unions have always worked for the extension of the best educational facilities to the masses, and their efforts have stimulated the creation by municipal authorities in Copenhagen and elsewhere of schools affording all kinds of technical instruction. Evening classes during the winter, organised by the Labour party and the trade unions on their own account, have been running for some years. The course of instruction includes Danish language, history of socialism, history and practice of trade unions, industrial development of Denmark, statistics, and economics. The students, who usually number about 50, pay a fee of 5 *kronen*, while the organisations concerned subscribe 60 *kronen* per pupil. In the winter of 1917-1918 there was widespread unemployment as a result of the unrestricted submarine warfare; the trade unions therefore founded a Workers' Higher School for the unemployed, which was attended by 500 persons, the majority of whom were between twenty and thirty years of age. The lectures and individual instruction covered a wide range of subjects: world history, history of literature, economics, hygiene, natural science, elements of law, business correspondence, and book-keeping. The school was re-opened in the winter of 1918-1919, and several subjects were added to the curriculum. The cost was largely defrayed by the state and by the municipality of Copenhagen. During the winter of 1920-1921, a period of severe unemployment, another school was established with the aid of a municipal subsidy. In addition to their efforts in the sphere of general education, the unions have sought to spread a knowledge and appreciation of the fine arts among the workers and the unemployed, and have organised concerts, lectures, and plays in Copenhagen and in the provinces.

## Employers' Organisations

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THE movement towards the organisation of central federations of employers' associations is particularly well exemplified in the notes of this month. In Queensland (Australia), in Czechoslovakia, in Chili, and in two quite separate spheres in France, central organisations have recently been formed, or are projected.

Among the questions of the moment, the application of the principle of the 8-hour day continues to command wide attention. The general sentiment would appear to favour a larger number of supplementary hours, and greater facilities for the arrangement of hours of work, at least for a transitional period, or until normal economic conditions are restored. An interesting point is made by the Executive Council of the (French Association of Metal and Mining Industries in Mechanical, Electrical, and Metal Engineering. It is argued that the present crisis is due not to lack of real demand—requirements, it is stated, have never been so large as today—but to lack of effective demand, or ability to pay the prices charged.

The brief extracts given here from the report of the Associated Industries of Indianapolis, widely known as ardent protagonists of the open shop movement, are interesting as affording some insight into the motives upon which the open shop policy is based.

### INTERNATIONAL ORGANISATIONS

The International Federation of Building and Public Works (*Fédération internationale du Bâtiment et des Travaux publics*), which held its congress at Brussels in October 1921 <sup>(1)</sup>, decided to request the International Labour Office to arrange, if possible, that its Governing Body should receive delegations from the chief international organisations both of employers and of workers. The matter has now been submitted to the Governing Body and the Federation has drawn up a statement defining its point of view on hours of work. This statement quotes the resolutions unanimously adopted by the Brussels congress recommending the suspension of the Eight Hour Act in countries where it is in force until the international situation becomes stabilised, and urging the adoption of the year as a whole as the basis for calculating hours in such industries as brick works, quarries, etc. It points out that the congress did not wish to condemn the principle of the 8-hour day, but only to emphasise its inopportuneness under present conditions. The great deficit in houses which is general throughout Europe calls for greatly increased production in the building industry. This should be based on the maintenance of the present daily wage combined with a reduction in hourly rates, which seems essential in order to reduce the labour cost of building and, indirectly, the cost of the materials used. The present high cost of building acts as a deterrent, not only to capital, but to persons with a small fixed income and workmen, who cannot think of building, buying, or renting houses at present prices. The essential conditions for the solution of the problem are stated to be "increased output and reduced hourly wage rates". Finally, the Federation declares its belief that politicians, trade unions, and leaders of industry

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<sup>(1)</sup> Cf. *International Labour Review*, Vol. IV, No. 3, Dec. 1921, p. 44.

will succeed in coming to an agreement consistent with the prosperity of the building industry which will "guarantee the worker an adequate daily wage without forcing him to do more hours of work than the 2,500 laid down by the French Act".

### NATIONAL ORGANISATIONS

#### Australia

A State conference of Queensland employers was held in Brisbane during the week ending 28 January, to discuss measures for restoring normal conditions, so that the State might continue to hold its place in international trade and develop its natural resources with some greater degree of prosperity. The seventy delegates present were thoroughly representative of the whole of Queensland industry.

It was pointed out that the Commonwealth Statistician's report showed a falling off in the volume of production in Australia between 1913 and 1920 equivalent to 30 per cent. per head of population. Figures were also quoted indicating that the unemployment problem was more serious in Queensland than in any other State in the Commonwealth.

A resolution was adopted drawing the attention of the Queensland Government to the fallacy on which the basic wage is founded as evidenced by the wide-spread unemployment, and strongly urging the desirability of amending the Industrial Arbitration Act so that it might afford equitable treatment to employee and employer alike.

A resolution was also adopted in favour of the formation of a single federation of employers, in the following terms :

That, in the opinion of this conference, the time has arrived for all employers to unite in one federation for the purpose of defending and protecting their interests against unreasonable aggression, especially as such interests have been established by the patient, thrifty, industrious, and enterprising efforts of those engaged in managing and conserving the various industries of the State, which are chiefly represented by the members of this conference. That this meeting recommends to the Queensland Employers' Federation that, when matters have to be dealt with of common interest affecting Queensland as a whole, opportunity of discussing and assisting in decisions be given Northern and Central Queensland associations, and other organisations affiliated or concerned.

#### Belgium

The Brussels Chamber of Commerce has unanimously adopted the following resolution on the 8-hour day :

The Chamber of Commerce, loyally devoted to the protection of individual liberty, wishes to emphasise the importance of those considerations which have led it to oppose all legislation preventing persons from doing work which it would be to their interests to do ;

It again draws attention to the grave risks to which the economic future of the country is exposed as a result of this deplorable Act ; it notes that Belgium is the more seriously affected, as other nations do not apply the 8-hour day, or in any case considerably modify its severity, or are even attempting to liberate themselves from its restrictions in order to return to the freedom of labour agreements ;

The Chamber, therefore, again demands the suspension of this disastrous legislation by the application of Section XII of the Act.

#### Czechoslovakia

The Federation of Czechoslovak Manufacturers (*Ustredni svaz Ceskoslovenskych prumyslniku*) was founded in 1918 as a trade organis-

ation independent of the Government and of all political parties, its object being to organise the employers of Czechoslovakia without distinction of nationality. In 1920 the Federation was re-organised and was divided into 17 groups, comprising 105 sections, including in all 6,347 undertakings. For some months past negotiations have been carried on with regard to the amalgamation of the Federation with the Central Federation of German Manufacturers and other smaller federations, and an agreement has now been arrived at providing for the institution of a Central Council of Czechoslovak Manufacturers, the members of which will be nominated by the central organisations of Czechoslovak, German, and Hungarian manufacturers in the Czechoslovak Republic, and by certain organisations not affiliated to these central federations.

On 14 March 1922 a meeting of the Central Committee of the Federation of Czechoslovak Manufacturers was held at Prague. Mr. Hodacz, secretary of the Federation, in his general report, dwelt upon the growing seriousness of the industrial situation. According to Mr. Hodacz the country, which had been very prosperous during 1921, towards the end of the year commenced to feel the effects of the general European crisis. Production has fallen off; the number of unemployed increased from 20,000 on 15 November 1921 to 50,000 on 15 February 1922; many undertakings were working on short time; and the number of firms going into liquidation increased by one-third. The situation is largely attributable to the rise in value of the Czechoslovak *krone*. The export trade of the metallurgical, leather, chemical, and glass industries, and the export of food stuffs, has been completely checked. The building industry is practically at a standstill. All possible steps were taken to remedy the situation by eliminating waste and by standardisation, but no really efficacious remedy would appear to be possible other than reduction of wages. Manufacturers must inform their workers of the difficulties with which they have had to contend since the rise of the *krone* had hindered export. In a certain number of cases wage reductions varying between 7 and 12 per cent. have already been carried out, while in the industries most affected, such as those of metal working and glass making, greater reductions are to be expected. Even better industrial organisation and reduction of wages may not prove sufficient to rehabilitate the industrial situation. It may become necessary that some steps should be taken by the state in order to make it possible for manufacturers to compete in foreign markets.

## Chili

An employers' organisation known as the Association of Industry (*Asociación del Trabajo*) has recently been set up at Santiago in Chili. The object of the Association is to co-ordinate the activities of its members with regard to questions concerning the development of industry, agriculture, and commerce, and to take all possible steps with a view to harmonising the legitimate interests of employers and workers. The Association aims at improving the economic conditions and the individual and general welfare of all workers, particularly those employed by its members. It is pledged to defend by all means in its power the right of the individual to work and will give assistance to members who are faced with difficulties owing to sympathetic strikes and similar disputes.

The members of the Association will be organised territorially in trade groups (*Centros gremiales*) in each department and industrially in unified centres (*Centros Unicos*) comprising similar industries in several departments. Each of these centres will appoint a delegate to

an Advisory Assembly, which will advise the General Council of the Association on all matters falling within its competence. This central Council consists of one delegate from each province, elected by the presidents and vice-presidents of the advisory councils of the departments, and one representative of each trade.

### France

On 9 March 1922 the Executive Council of the Association of Metal and Mining Industries in Mechanical, Electrical, and Metal Engineering (*Union des industries métallurgiques et minières de la construction mécanique, électrique, et métallique*) addressed a letter to the President of the Labour Committee of the French Chamber of Deputies on the subject of the 8-hour day. This letter deals particularly with the method advocated by the Minister of Labour of compensating for any reduction in output which might result from the 8-hour day by means of better technical organisation of labour and the improvement of machinery. The question is raised as to whether at the time when the 8-hour Act came into effect there were any technical improvements left to be made by manufacturers and whether they had the material and financial means of making them. It is pointed out that long before the war the shortage of labour in France and the rise in wages had caused employers in large and small undertakings alike to try to reduce the cost of production by introducing improvements in machinery, methods of manufacture, and organisation of labour. During the war, too, the need for an intensive development of manufacture led them to make special improvements in methods and equipment. Further, there are numerous undertakings of comparatively small size which by their nature, their often exclusively local circle of customers, and the limitations of the premises at their disposal, are unable to change their equipment.

The letter goes on to discuss what other means there are to "compensate for the diminution in output caused by the reduction in hours of work, and realise the hope of effecting a reduction in the cost of production". It states as the belief of all producers that the present crisis is mainly caused, and in any case aggravated, by the excessive prices of commodities, due to exorbitant costs of production, which discourage customers, both at home and abroad. "Requirements have never been so large as today, but they cannot be met until prices have fallen, and this can only be obtained by means of more favourable conditions of production and harder work. Until the double evil of reduced output and increased cost of production has been remedied, it may be said that nothing has been done to restore business".

The letter concludes by summarising the changes which it considers necessary in order to obtain an improvement in the present situation. These include provision for overtime at the ordinary weekday rate up to 300 hours a year (in place of the 100 hours which is at present allowed) for a transitional period of seven years; greater facilities to the manufacturers in the organisation of labour, particularly as regards the arrangement of hours of work; and a definite ruling that provisions relating to hours of work apply exclusively to actual hours of work and not to hours of mere attendance.

On 15 March 1922 the Confederation of French Production (*Confédération générale de la Production française*) held its general meeting at Paris. The report on the work of the Confederation during 1921 dealt chiefly with the measures taken to reduce the cost of production, the

opposition of the Confederation to the Bills on family allowances and social insurance, and the international activities of the organisation. The fact is recalled that during 1921 it was necessary to reduce wages in order to bring down costs of production and so prevent unemployment by increasing home consumption and developing export trade. In the opinion of the Confederation this reduction in wages was effected in most industries without exciting much protest on the part of the workers, who were fully aware of the seriousness of the economic situation. The report calls on all its affiliated organisations to support a resolution for suspension of the 8-hour Act until the restoration of normal economic conditions.

Following on the spontaneous establishment of funds for family allowances by various employers, legislative proposals had been brought forward to convert such voluntary action into a legal obligation. The General Confederation had requested its affiliated organisations to oppose this Bill, pointing out that the best means of proving to Parliament that its intervention was unnecessary would be the extension of the voluntary system of family allowance funds, and asking the organisations to carry on active propaganda for this end among their members.

The Confederation had also found itself compelled to oppose the Government Social Insurance Bill. The chief objections which it had urged before the Social Welfare Committee of the Chamber of Deputies concerned the principle of compulsion involved; the financial burden on the Treasury, which could only be covered by further taxation, the greater part of which would fall upon industrial undertakings; and the payment of the workers' contributions, which, it was considered, would have to be borne directly or indirectly by industry. In order, however, to show that it was not hostile to the general principle, the General Confederation had declared that it was ready to examine any proposal which would make use of existing institutions and which would fix a reasonably low rate of contribution.

The report refers to the part played by the Confederation in the work of the International Labour Organisation in general, and of the Third Session of the International Labour Conference (Geneva 1921) in particular, and declares that it is essential that these conferences should limit their activities so as not to make too great a demand on legislators, in order to prevent the idea becoming prevalent that the Conventions and Recommendations adopted have only the force of simple resolutions.

In international matters generally, the Central Council was of the opinion that the growth of international relations, and the increasing reaction beyond national frontiers of economic problems of an essentially national character made it necessary that central organisations should undertake the protection of French interests. It was with this in mind that the Central Council had taken part in the work of the International Labour Office and of the International Chamber of Commerce, a course which seemed to be in agreement with the general conception of the functions of a confederation of employers' associations.

The Federation of Small Manufacturers in the Boot and Shoe Industry (*Fédération de la petite industrie de la Chaussure*) has taken the initiative in calling a National Congress of French Artisans, which was held at the same time as its own congress, in order to form a General Confederation of French Artisans. The two congresses took place in Paris on 26, 27 and 28 March.

The term "Small Manufacturers and Artisans" is applied in France to persons who carry on a manual occupation at their own risk, who

own their stock-in-trade, who work themselves, and who employ not more than five persons, including members of their family, either adult workers or apprentices. Hitherto such small manufacturers and artisans have not taken part in the movement in favour of industrial organisation which has been noticeable during the last few years in medium and large-scale industry, the wholesale trade, and even among retailers.

The Congress of Small Manufacturers in the Boot and Shoe Trade proceeded at once to the examination of a draft Bill concerning the commercial status of industrial associations and the regulations for the endowment funds of associations formed by artisans who have set up stores for the distribution of raw materials (Mutual Guarantee and Protection Societies). It also requested the General Confederation of French Artisans, which is to be created, to take appropriate steps regulating the question of credits. It was resolved that the Confederation should be asked to establish as soon as possible a credit fund (*Caisse de Crédit confédéral de l'Artisanat français*), which fund would obtain subsidies from the state and would be authorised to issue bonds similar to those of the *Crédit Foncier* and the *Crédit National*. The congress further demanded that mutual insurance funds for artisans and small manufacturers against industrial risks and fire should not be subject to the restrictions imposed on insurance societies, but should be constituted in conformity with the regulations relating to industrial associations and be permitted certain privileges, such as exemption from stamp and registration duties.

The Artisans' Congress proceeded to constitute definitively a General Confederation of French Artisans (*Confédération générale de l'Artisanat français*) with headquarters at 71 rue de Chapelle, Paris. The purpose of this new organisation, as defined in its constitution, is "to contribute to the development of artisan manufacture, to co-ordinate the work of affiliated federations and unions, to organise all artisans by occupation, and to support demands made by affiliated groups". The Confederation is sub-divided into seven groups, (1) hides and leather, (2) hairdressing and allied trades, (3) inventors, (4) metal working, (5) building, (6) furniture trades, and (7) clothing trades. It includes already, in addition to the Confederation of Small Manufacturers in the Boot and Shoe Trade, the Association of Small Manufacturers and Inventors, the Federation of Artisans in the Furniture Trade, the Association of Shirt Makers, the Association of Parisian Master Tailors, and the Federal Association of Hairdressers.

It has been announced that an artisans' group will shortly be formed in the Chamber of Deputies, and that a similar group working in co-operation with that in the Chamber will be formed in the Senate.

By agreement between the chambers of commerce and similar associations employers' organisations in France are grouped into a number of "economic regions". At the Third Congress of the fifth "economic region" held at Tours on 1 April 1922 a proposal was made to consolidate all the central employers' federations into a National Federation.

This body would include the Association of Economic Interests (*Union des intérêts économiques*), the Confederation of Commercial and Industrial Groups (*Confédération des groupes commerciaux et industriels*), the National Confederation of French Production (*Confédération nationale de la production française*), the National Association for Economic Expansion (*Association nationale d'expansion économique*), the Federation of Employers in Industry and Commerce (*Fédération des industriels et des commerçants français*), the Industrial and Agricultural

Association (*Association de l'industrie et de l'agriculture*), the Federation of French Retailers (*Fédération des commerçants détaillants de France*), and the Alliance of Employers in Commerce and Industry (*Fédération des commerçants et industriels mobilisés*).

According to the resolution adopted the functions of the projected Federation would be "to guide the policy of the regional and Department federations and associations, and to receive the complaints and resolutions of all these organisations in order to transmit them to the public authorities and to support them as far as possible".

### Great Britain

An Article in the *Bulletin of the Federation of British Industries* of 7 March 1922 on *The Works Magazine as an Aid to Industrial Understanding* states that more than two hundred of these publications are issued in Great Britain. Some indication of the recognition given to them may be gathered from the variety of industries in which they are published. These include engineering of all kinds; iron and steel manufacture; shipbuilding; foodstuff manufacture; printing trades; coal gas manufacture; banks; textile manufacture; railways; distributing trades; and flour mills. The view is advanced that a works magazine can be made the most effective means of providing a common ground upon which employer and employed may meet in those large concerns where direct personal contact is impossible. It can be used as a means of giving the employee a wider view of the organisation for which he is working and of making him feel that he is something more than a mere piece of machinery. Generally speaking, a works magazine contains full reports of the social activities of the firm together with original articles, letters, and cartoons by employees. Some magazines act as official organs of works' committees. Articles are published on raw materials, machinery, the work of different departments, the markets, the customers, new processes; and on the more personal human side appear interviews with old employees and home features such as photographs of employees' children.

As few firms possess on their staffs any who have both the time and the experience necessary for the publication of a works magazine, the Industrial Welfare Society decided some time ago to offer the services of its editorial department to such firms as might desire them. It undertakes complete responsibility as far as routine and technical work is concerned, while acting in an advisory capacity in the shaping of editorial policy. It also supplies articles and cartoons by some of the best authors and artists available at considerably lower fees than would have been possible had the same contributions been sought individually.

### India

At the annual meeting of the *Associated Chamber of Commerce of India and Ceylon* held at Calcutta towards the end of January 1922 the following resolution proposed by the Bombay Chamber of Commerce was adopted :

This Association expresses its fullest sympathy with any proposals of a practical nature designed to improve the conditions of labour in India, but, while recognising that full advantage should be taken of the experience gained elsewhere, considers that all legislation undertaken in India should be framed primarily with regard to special conditions obtaining in this country.



### Serb, Croat, and Slovene State

The Committee of the *Employers' Federation of Industry, Handicrafts, and Commerce in Croatia* held a plenary session on 28 March 1922 at Zagreb, to consider that part of the Bill for the protection of labour which regulates the daily hours of work and holidays of workers. After considerable discussion a number of conclusions were adopted as the basis of a memorandum to be drawn up. The most important of these points were : that there should be no restriction on the work of employers themselves or their families ; that in towns with more than 10,000 inhabitants, hours of work should be 9 per day, in all other places 10 per day ; that in undertakings of a seasonal nature such as building, hours of work should be extended to 10 per day everywhere ; that the hours between which shops and similar establishments might be open should be 6 a.m. to 8 p.m. ; that complete stoppage of work should only be allowed on Sundays and Christmas Day ; and that employers should pay their workers proportionately to the hours of work.

### United States

At the Eighteenth Annual Meeting of the *Associated Employers of Indianapolis* held on 16 February 1922 a joint report was submitted by the retiring president and the secretary of the Association on the *Growth and Prosperity of Indianapolis and how it is promoted by the Open Shop*.

The Associated Employers of Indianapolis was formed in 1904. It is stated that at that time Indianapolis "was known far and wide as a helplessly unionised and strike-ridden community, where professional agitators and strike promoters held full sway". It is now reported that Indianapolis is 90 per cent. open shop, the printing and building trades being the only ones which have maintained a strong union organisation. The success of the open shop movement thus indicated is considered to be in the main attributable to the efforts of the Associated Employers of Indianapolis, which is generally considered as one of the most active of the open shop associations in the United States.

The report states that the Association members

have no quarrel with union labour as such, nor have they any desire to interfere with legitimate functions and activities of labour organisations when lawfully conducted with due regard for the rights of others. The Association recognises that labouring men have a lawful right, just the same as all other citizens, to organise themselves into unions for the legitimate purposes of self-betterment. The rights of unionists end, however, when their activities transgress upon the liberties of others who are not associated with them. Labouring men have a right to strike for any reason or no cause, but having quit their employment, they are no longer interested parties to the bargain previously existing.

The Association insists that the right of one man to work is as much entitled to respect and enforcement as the right of another to cease work or strike. The right of an employer to employ any workman he pleases is as strong as the employee's right to refuse to work. The privilege of labour to organise does not carry with it the right to inflict hardship or injury upon workers who refuse to join the union, or upon employers who refuse to adopt the closed shop and exclude independent labour from their employment in the hiring of union men only.

It is further stated that

the keynote of membership in the Associated Employers of Indianapolis is co-operation between employer and employee ; it stands pledged for the

preservation of the rights of all labour, both organised and unorganised. This is demonstrated by the fact that, through the efforts of your Association, Indianapolis has two city ordinances that are especially designed to protect all classes of working people (union and independent) from strike interference in the exercise and enjoyment of their constitutional guarantees of "Life, Liberty, and the Pursuit of Happiness". One of these is the anti-banner-carrying ordinance, which prevents strike pickets from advertising factories and stores as "unfair" because they do not discriminate against unorganised workers, and the other is the anti-picketing ordinance, which prohibits strike pickets from unlawfully interfering with any persons who wish to work in, or patronise, any factory or store.

It is claimed that among the advantages accruing to Indianapolis as a result of its open shop policy are a comparative immunity from unemployment, and a rapid rate of growth, as shown by the increase in building operations, while wages and salaries paid by local employers compare favourably with those paid by the employers of any other competitive business centre.

The *Building Trades Employers' Association of New York City* has drawn up a number of principles which its members believe should prevail as the basis for trade agreements. Mr. C. G. Norman, Chairman of the Board of Controllers of the Association, states that the employers will advocate the adoption of these principles by the Building Trades Council (the workers' organisation). These principles include the provision that all disputes be settled by trade boards of arbitration, with an umpire if necessary, the decision of such trade boards and umpires to be final and binding, and that no strike, lock-out or stoppage of work be allowed to take place; that no restriction be placed on the amount of work a man may perform, or the use of machinery or new methods; that the employer be at liberty to employ and discharge whomsoever he sees fit; and that the foreman be recognised as the agent of the employer. Other provisions deal with the establishment of an apprenticeship system to be administered under joint management, and the restriction of overtime to cases of unavoidable emergency.

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

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## Cost of Living and Retail Prices

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WHILE wholesale prices are showing more and more a tendency to become stabilised, retail prices, according to the latest available figures, are in general continuing their downward trend. At present, the rise in retail price index numbers since 1914 for most countries is still considerably above that of wholesale prices and the fall of retail prices is therefore likely to continue. During the first months of the present year, the cost of living fell in many countries to a level about equal to that in 1918 or 1919, e.g. in Australia, South Africa, Canada, Denmark, the United States, Norway, and Sweden, while in the United Kingdom and Switzerland the cost of living has now fallen to the level of 1917. The lowest retail price increase in the world is to be found in South Africa, where in March 1922 the index number was only 20 per cent. above July 1914.

A few exceptions to the above general statements are to be noticed. In two countries, France and Italy (Rome), retail prices have been, if not increasing, yet irregularly fluctuating without a clear tendency to fall. In the former the price level is about three times as high as the 1914 level, and in the latter it is still about five times as high, the latest figure received, that for March, however, showing a fall.

The upward movement in the Central European countries still continues at a quicker rate during the first quarter of the present year than in any previous quarter. In Germany, the increase is following the rise in the wholesale price index number, though it is still a long way behind the level of the latter. These phenomena, of course, are due to the abnormal economic and financial conditions as reflected in the depreciation of the currency in those countries.

There are considerable differences in the price movements of the different groups of commodities included in the cost of living index. The movements in the food indices, forming the largest item in the general index numbers, generally precede the movements in the latter. The fall in the retail prices of food has in general been greater than that in the cost of living as a whole and in several countries the level is now back to that of five years ago (e.g. the United Kingdom, the United States, Switzerland, South Africa, Canada) while in many others it is down to the level of 1918 and 1919.

For the other groups few index numbers are as yet available for the first quarter of 1922.

The clothing indices, the maxima for which have been considerably higher than for the other groups, show also a declining tendency, but more irregular and slower than the general or food indices. Their level, moreover, is still above that of all the other groups.

The general fall in the heating and lighting groups began after the first quarter of 1921, and has continued in most countries since then (again excepting the Central European countries), as in the case of the food index. The price level of this group is still considerably higher

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(1) 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.

than for the general and food index numbers, but lower than that of clothing.

The few figures concerning the movement of rents received since the last issue of the *Review* show no change except for Germany, where an increase from 182 in December to 200 in March is recorded, due to legislation amending the Rent Restriction Acts. The increase in rents, however, is almost negligible compared with that in foodstuffs, clothing, and other items of the family budget.

The movements of the cost of living and of the different items included are given below in the tables I to VIII, which give the latest figures, generally to March 1922, for all the different countries available. These tables are on the same plan as in the previous numbers of the *Review*, with the exceptions (1) that a new series of index numbers for food prices in Australia based on returns for 30 towns has been substituted for the series based on 6 towns formerly given and still retained for the general cost of living index number in table I, and (2) that new series are given in tables I, II and IV for Finland where the official index numbers have been recently changed, chiefly through the inclusion of taxes (see Note on the Methods below).

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

The above 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 pre-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 post-war base period, which, wherever possible, is taken as December 1920=100.

A short account of the scope of the index numbers and the methods of compilation used, together with a list of sources, was given in previous numbers of the *Review* (2). A reference to this will show that 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.

For Finland, the method previously described has been changed by an Order of 19 May 1921, and the new official series has been re-calculated back to January 1921; the note on this country should therefore now be replaced by the following.

#### **Finland : *Sosialinen Aikakauskirja—Social Tidskrift.***

Groups included in the budget : food (14), clothing (2), rent, fuel, tobacco, a daily newspaper, and taxes (new group). Collection of prices : official agents of the Board of Social Affairs investigate daily on the current retail prices in 21 towns. System of weighting : standard budget, based on an official enquiry made in 1908-1909, the average consumption within the family being supposed to have remained unaltered. The indices are monthly, and refer to the average of the month. Base : first half of 1914 (instead of July 1914) =100.

(2) See *International Labour Review*, Vol. V, No. 4, April 1922, pp. 605, 611 to 615, and No. 5, May, p. 771 (Note on Canada).

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 (47 towns) (Berlin)		Australia (6 towns) (a)	Austria (Vienna)	Belgium (61 towns) (a)	Bulgaria (12 towns)	Canada (60 towns)	Den- mark (100 towns)	United States (32 towns)	Finland (21 towns)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
July 1914	100	100	100	100	100	100	100	100	100	100	100
1915	103	*	*	108	*	*	*	104	116	105	*
1916	106	*	*	116	*	*	*	119	136	118	*
1917	114	*	*	113	*	*	*	143	155	142	*
1918	118	*	*	118	*	*	*	161	182	174	*
1919	126	*	*	129	*	*	*	179	211	177	*
1920	159	842	1125	153	*	453	*	204	262	217	93½
1921											
Jan.	153	944	1122	*	*	450	1618	*	264	*	1136
Feb.	149	901	1090	*	*	438	1596	*	*	*	1086
Mar.	147	901	1035	158	8400	411	1506	177	*	*	1101
Apr.	144	894	976	*	*	399	1564	*	*	*	1083
May	141	880	990	*	*	389	1570	*	*	180	1091
June	136	896	1080	149	9800	384	1666	163	*	*	1128
July	133	963	1125	*	*	379	1612	*	237	*	1214
Aug.	130	1045	1177	*	*	384	1762	*	*	*	1249
Sept.	130	1062	1212	143	*	386	1896	165	*	177	1278
Oct.	128	1146	1340	*	20500	391	2038	*	*	*	1279
Nov.	127	1397	1767	*	*	394	2149	*	*	*	1291
Dec.	124	1350	1934	140	59400	393	2187	161	*	174	1172
1922											
Jan.	122	1640	1903	*	*	387	2259	*	212	*	1124
Feb.	120	1989	2177	*	*	380	—	—	—	*	1120
Mar.	120	2302	2709	—	—	371	—	—	—	167	1107
Apr.	—	2804	3177	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—

TABLE II. FOOD INDEX NUMBERS

Date	South Africa (9 towns)	Germany (47 towns) (Berlin)		Australia (30 L) (a)	Austria (Vienna)	Belgium (61 L) (a)	Canada (60 towns)	Den- mark (100 towns)	United States (51 towns)	Finland (21 towns)	France (a) (Paris) (220 L)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
July 1914	100	100	100	100	100	100	100	100	100	100	100	100
1915	107	*	*	131	*	*	105	128	98	*	120	123
1916	116	*	*	130	*	*	114	146	109	*	129	142
1917	128	*	*	126	*	*	157	166	143	*	183	184
1918	134	*	*	131	*	*	175	187	164	*	206	244
1919	139	*	*	147	*	*	186	212	186	*	204	289
1920	197	1156	1377	194	*	459	227	253	215	1082	373	388
1921												
Jan.	172	1265	1439	184	*	493	190	276	169	1205	440	*
Feb.	165	1191	1357	184	*	482	178	*	155	1138	382	*
Mar.	160	1488	1316	181	8400	434	172	*	154	1169	358	429
Apr.	156	1471	1235	173	*	417	165	*	149	1145	328	*
May	152	1152	1244	168	*	407	150	*	142	1157	317	*
June	144	1175	1449	165	9800	419	148	*	141	1188	312	363
July	139	1274	1541	161	*	410	154	236	145	1323	306	*
Aug.	134	1399	1592	161	*	427	159	*	152	1369	317	*
Sept.	133	1448	1653	154	*	423	155	*	150	1404	329	350
Oct.	131	1532	1796	—	20700	434	149	*	150	1401	331	*
Nov.	129	1914	2227	147	*	442	148	*	149	1324	326	*
Dec.	125	2088	2541	143	60300	438	149	*	147	1230	323	349
1922												
Jan.	121	2219	2622	142	—	417	143	197	139	1151	319	*
Feb.	119	2727	3051	140	—	399	142	—	139	1145	307	*
Mar.	119	3152	3580	—	—	382	138	—	136	1124	294	323
Apr.	—	—	4255	—	—	—	—	—	—	—	306	—
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 I (cont.). COST OF LIVING INDEX NUMBERS**

France (Paris) (a)	India (Bombay)	Italy		Norway (30 towns)	New Zealand (15 towns) (a)	Nether- lands (Amsterdam) (a)	Poland (Warsaw)	United Kingdom (610 towns)	Sweden (40 towns)	Switzer- land (23 towns)	Date
(13)	(14)	(Rome) (15)	(Milan) (16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
100	100	100	100	100	100	100	100	100	100	100	July 1914
*	*	99	*	147	407	*	*	125	*	119	1915
*	*	116	*	146	411	*	*	148	139	140	1916
*	*	146	*	190	449	142	*	180	166	180	1917
*	*	197	286	253	127	183	*	203	219	229	1918
238	*	205	280	275	132	195	*	208	257	261	1919
341	189	313	441	302	149	217	*	255	270	253	1920
											1921
*	169	374	571	*	*	*	44084	251	*	237	Jan.
*	162	379	566	*	*	*	17024	241	*	234	Feb.
338	160	384	568	301	160	*	17974	233	249	231	Mar.
*	160	411	571	*	*	*	17244	228	*	212	Apr.
*	167	396	574	*	*	*	17909	219	*	210	May
307	173	390	506	302	157	*	20270	219	236	214	June
*	177	387	494	*	*	*	25709	222	*	209	July
*	180	391	501	*	*	*	30407	220	*	206	Aug.
295	185	400	520	296	156	*	39817	210	231	200	Sept.
*	183	415	535	*	*	*	48656	203	*	198	Oct.
*	182	423	541	*	*	*	47628	199	*	192	Nov.
297	179	423	539	283	149	*	46740	192	216	189	Dec.
											1922
*	173	430	523	*	—	*	46883	188	*	179	Jan.
*	165	426	522	*	—	*	—	186	*	177	Feb.
291	165	—	503	257	—	*	52358	182	195	167	Mar.
—	162	—	—	—	—	*	—	181	—	—	Apr.
—	—	—	—	—	—	*	—	—	—	—	May
—	—	—	—	—	—	*	—	—	—	—	June

**TABLE II (cont.). FOOD INDEX NUMBERS**

India (Bombay)	Italy		Norway (30 towns)	New Zealand (15 towns) (a)	Nether- lands (Amsterdam) (a)	Poland (Warsaw)	United Kingdom (610 towns)	Sweden (40 towns)	Switzer- land (23 towns)	Czecho- slovakia (30 towns)	Date
(14)	(Rome) (15)	(Milan) (16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
100	100	100	100	100	100	100	100	100	100	100	July 1914
*	95	*	123	112	114	*	132	124	119	*	1915
*	111	151	153	119	117	*	161	136	141	*	1916
*	137	210	203	127	146	*	204	171	179	*	1917
*	203	321	271	139	175	*	210	265	222	*	1918
*	206	304	290	144	196	*	209	312	250	*	1919
*	318	445	319	167	210	*	262	288	239	*	1920
											1921
163	367	571	334	178	193	25140	263	275	224	1643	Jan.
156	376	564	308	175	194	31827	249	255	221	1494	Feb.
154	386	582	299	169	193	32883	238	247	218	1423	Mar.
154	432	598	300	169	187	31711	232	242	211	1450	Apr.
162	421	598	292	168	184	32640	218	232	208	1456	May
169	409	523	290	166	180	35393	220	231	213	1445	June
174	402	506	295	164	180	45655	226	230	207	1346	July
177	417	518	297	163	179	53100	225	231	204	1362	Aug.
183	430	545	290	161	179	60728	210	228	198	1474	Sept.
180	461	561	288	156	168	75174	200	218	196	1519	Oct.
179	459	570	281	152	154	75848	195	210	189	1544	Nov.
176	458	567	268	150	150	74626	185	202	187	1544	Dec.
											1922
169	469	558	257	147	148	73681	179	189	176	—	Jan.
160	463	562	245	145	150	—	177	188	173	—	Feb.
161	—	525	238	141	148	81269	173	185	162	—	Mar.
157	—	—	234	144	—	—	172	182	—	—	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 (21 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	1316	*	260	355	288	1049	485
Mar. 1921	1077	15400	195	*	*	1031	398
June »	1077	18500	173	248	223	1032	353
Sept. »	1197	38400	173	*	192	1090	318
Dec. »	2188	111900	173	225	184	1107	318
Mar. 1922	3385	—	—	—	—	1098	—
June »	—	—	—	—	—	—	—

**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 (21 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
Mar. 1921	176	1211	5000	208	*	*	1252	319
June »	—	1316	5300	196	401	182	1270	308
Sept. »	—	1368	10700	190	*	181	1250	307
Dec. »	—	2158	34000	186	333	181	1249	306
Mar. 1922	—	3263	—	—	—	—	1231	—
June »	—	—	—	—	—	—	—	—

**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 (21 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
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	124	600	143	141	161	603
Mar. 1922	—	200	—	—	—	—	—	603
June »	—	—	—	—	—	—	—	—

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
239	576	696	308	325	295	Mar.	1921
263	495	532	292	290	270	June	»
268	—	534	280	265	250	Sept.	»
261	—	563	271	250	240	Dec.	»
253	—	596	260	—	225	Mar.	1922
—	—	—	—	—	—	June	»

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	182	»	1917
*	160	220	476	136	—	293	302	»	1918
*	—	220	316	145	—	295	372	»	1919
151	178	611	477	177	230	386	387	»	1920
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.	»
167	—	530	—	—	—	196	212	Mar.	1922
—	—	—	—	—	—	—	—	June	»

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	100	*	»	1915
*	*	—	*	106	100	100	108	»	1916
*	*	—	*	109	102	100	112	»	1917
*	*	100	100	110	104	100	112	»	1918
100	*	100	100	123	107	100	120	»	1919
100	165	100	108	147	116	118	130	»	1920
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.	»
—	165	—	184	—	—	—	163	Mar.	1922
—	—	—	—	—	—	—	—	June	»

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	38 towns	Lodz	Posen
Dec. 1920	100	100	100	100	*	*	100
Jan. 1921	105	104	*	*	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. »	104	99	94	90	255	216	645
Oct. »	103	105	*	*	—	—	—
Nov. »	104	107	*	*	—	—	—
Dec. »	103	107	92	86	—	—	—
Jan. 1922	99	105	*	*	—	—	—
Feb. »	99	104	*	*	—	—	—
March »	96	103	—	—	—	—	—
April »	—	101	—	—	—	—	—

**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. »	111	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. »	966	111	115	96	84
Jan. 1922	1194	109	111	*	*
Feb. »	1500	107	109	*	*
March »	1517	102	108	—	—
April »	1677	—	105	—	—

**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	96	97	100	100	101	101
June »	68	79	73	79	104	88	83	87	100	100	109	111
Sept. »	68	79	74	77	104	88	88	86	100	110	113	113
Dec. »	73	78	72	71	93	91	84	75	100	110	114	115
Mar. 1922	76	79	—	—	58	93	—	—	132	109	—	—
June »	—	—	—	—	—	—	—	—	—	—	—	—

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

## Wholesale Prices in Various Countries

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**D**URING the first months of the present year, wholesale prices in many countries show a tendency towards stabilisation. The sharp fall of prices noticed during the latter part of 1921 seems, generally speaking, to have ceased, and the fluctuations are now of a smaller character probably due to certain seasonal circumstances.

A continued decline is shown only by some half-dozen countries: the three ex-belligerent countries, Belgium, France and Italy, where the price level is still from three to five times higher than in 1913, and two ex-neutral countries, Norway and Sweden, as well as in a small degree, by Japan outside Europe. In all these countries present prices are, generally, considerably lower than during the corresponding months of the previous year.

For about half the countries for which information is available the level of prices is stationary or even shows a slight rise. All the index numbers for the United States show small increases, chiefly due to a rise in the prices of agricultural products, and they now stand at about the same level as the average for 1921, but a little lower than during the corresponding months of 1921. The three index numbers for the United Kingdom have remained almost stationary at a level considerably below the average level of prices in 1921. In fact the general price level is now about the same as that for the year 1916, viz. about 60 per cent. above 1913 prices.

A similar tendency is noticed also in Denmark, the Netherlands, and Switzerland, among European countries, as well as in Canada, China, and Australia, in non-European countries. In all these countries the level of prices is much below the average level of the corresponding months of 1921 or in fact of any month during 1921, and is approaching, or has in some cases reached, the 1916 level.

Very different is the case in Germany, where prices are rising even more rapidly than at the end of 1921. In the month of April the index number was more than four times higher than the average price level in the year 1920—a reaction due to the special economic conditions of the country and the depreciation of German currency. Prices are now no less than about 60 times their level in 1913. The price movement in some other Central European countries (Austria, Poland, etc.) is doubtless similar to that of Germany, though no reliable figures are available.

The table given on p. 955 shows the index numbers of wholesale prices up to February and March 1922 for all countries for which such information is available and follows the plan of the corresponding table in the previous numbers of the *International Labour Review* (q. v.), with the exception of China (Shanghai), for which a new series is given with February 1913 instead of September 1919 as base.

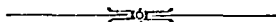
### NOTE ON THE METHODS OF COMPILING THE INDEX NUMBERS OF WHOLESALE PRICES

The sources from which the figures are taken and the methods of compilation used in each country have been indicated in the corresponding article in the

April number of the *Review* <sup>(1)</sup>. Most of the recent figures are supplied by the courtesy of the Economic and Financial Section of the Secretariat of the League of Nations. The note on China should be replaced by the following, for use with the figures now given.

**China.**

The index number for Shanghai formerly published in this *Review* (calculated by the Bureau of Markets of the Chinese Treasury) was based on prices in September 1919 as base year. In order to afford a comparison with the pre-war basis, it was decided in February 1922 to extend it back, and the month of February 1913 was chosen as base period, for which month the prices of 147 articles were collected. These new index numbers are now published in the table.



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<sup>(1)</sup> See *International Labour Review*, Vol. 5, No. 4, April 1922, pp. 616-623.

(Base shifted to 1913 = 100 as far as possible)

[illegible]

### INDEX NUMBERS OF WHOLESALE PRICES (continued)

[illegible]

# EMPLOYMENT AND UNEMPLOYMENT

## Statistics of Unemployment

**I**N general, the unemployment figures for the end of March 1922 show a slight decrease compared with previous months; this is the case for Great Britain, France, Switzerland, and the United States. In Germany, the railway strike at the beginning of February interfered with several industries and so increased the amount of unemployment during the first weeks of that month. This increase was only temporary, however, as the strike did not last long and favourable weather conditions made open air work possible; so that in spite of the strike the percentage of unemployment for the end of February was lower than for the preceeding month.

In Denmark and the Netherlands, the February figures—the latest available—show that unemployment had continued to increase. In the Netherlands, the crisis in the diamond industry is particularly acute, there being 76 per cent. of unemployed.

These observations do not apply to short time but only to total unemployment. Statistics of short time are very rare; in fact, they only exist for four countries, Great Britain, Italy, Switzerland, and Belgium, the figures for which are given below for the end of each quarter in 1921, and of each month in 1922. The figures in heavy type indicate the maximum for the year.

TABLE I. STATISTICS OF SHORT TIME

Date (End of month)	Great Britain		Italy	Switzer- land	Belgium
	Number	Percentage of insured workers	Number	Number	Number
<b>1921</b>					
April	<b>1,077,317</b>	9.0	69,270	<b>95,374</b>	<b>118,041</b>
June	832,340	6.8	<b>238,940</b>	76,116	86,823
September	322,315	2.6	154,300	69,421	60,958
December	315,760	2.7	178,662	53,970	36,232
<b>1922</b>					
January	287,499	2.4	159,231	49,181	36,092
February	266,162	2.2	149,711	46,761	32,100
March	222,693	1.8	—	40,355	28,912

These figures show a distinct drop in the number on short time in these four countries during 1921 and 1922. This can probably be explained by the fact that the workers on short time have now joined the ranks of the unemployed.

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

End of month	Germany	Austria	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	2093	53
Sept.	1994	252	76	*	115	177	29	68	943	2218	54
Dec.	1940	251	74	*	118	178	29	70	965	2280	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.	4816	308	*	192	310	257	38	314	1418	3721	118
D-c.	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	47	1636	4197	151
Dec.	5664	351	546	208	311	297	45	399	1535	11900	146
1921											
March	5779	344	668	207	294	237	51	394	1528	12000	165
June	5841	364	669	182	299	243	89	396	1279	12200	145
Sept.	5965	368	746	183	287	237	74	393	1433	12200	154
Dec.	6103	—	757	161	282	—	—	—	1432	11902	144
1922											
Jan.	5798	*	763	159	280	—	—	—	1446	11902	141
Feb.	6159	*	740	163	278	—	—	—	1390	12120	—
March	—	*	730	—	—	—	—	—	1353	12120	—
April	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—
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	6.1	5.8	15.8
1921											
March	3.7	11.4	10.4	16.5	23.6	22.1	16.1	13.9	10.0	11.3	24.5
June	3.0	12.5	9.9	13.2	16.8	20.1	20.9	8.1	23.1	17.8	27.7
Sept.	1.4	11.4	9.6	8.5	16.6	19.1	17.1	6.8	14.8	12.2	27.3
Dec.	1.6	9.5	6.6	15.1	25.2	—	22.9	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	34.8
Feb.	2.7	*	5.8	10.6	33.1	—	—	20.8 <sup>(2)</sup>	16.3	15.2	32.3
March	—	—	5.2	9.6	—	—	—	—	16.3	14.6	31.4
April	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—

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

(<sup>2</sup>) Provisional figures.

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

TABLE III. OTHER STATISTICS RELATING TO UNEMPLOYMENT

Date (End of month)	Austria		France		Italy		Switzerland		Czechoslovakia	
	Vienna	Total	Number of applicants for work	Number of persons in receipt of benefit	Number wholly unemployed	Number on short time	Number wholly unemployed	Number on short time	Number of persons unemployed	Number of persons in receipt of benefit
<b>1921</b>										
January	27,461	38,408	39,811	63,962	*	*	34,652	71,922	95,254	57,017
February	26,639	36,986	44,092	89,039	*	*	42,705	82,930	103,341	59,025
March	24,344	32,052	44,061	91,225	*	*	47,577	95,119	102,480	53,086
April	23,076	30,485	35,270	84,896	250,145	69,270	47,949	95,374	99,896	48,623
May	24,717	31,891	28,218	70,383	*	*	52,635	87,741	107,934	47,203
June	24,802	32,403	21,316	47,331	388,744	238,940	54,039	76,116	103,170	46,128
July	24,802	32,403	20,270	33,731	435,194	227,515	55,605	79,888	95,920	40,275
August	24,802	32,403	20,350	28,655	470,542	220,763	63,182	74,309	90,803	36,289
September	24,802	32,403	17,718	21,797	473,216	154,350	66,646	69,421	70,870	26,085
October	24,802	32,403	14,969	14,322	492,368	131,167	71,238	59,835	62,170	19,748
November	24,802	32,403	19,590	40,346	512,260	181,002	80,692	56,569	67,796	23,607
December	24,802	32,403	17,373	10,032	541,779	178,662	88,967	53,970	78,312	32,802
<b>1922</b>										
January	29,619	54,525	48,535	9,640	606,819	459,231	97,094	49,181	102,000	51,000
February	33,783	64,717	48,807	9,224	576,284	449,714	99,541	46,761	—	—
March	27,482	—	16,605	7,915	—	—	89,099	40,315	—	—
April	39,472	—	14,094	6,354	—	—	—	—	—	—

(1) These figures give the number of applicants for work remaining on the live register.

(2) Revised figures. — (3) Provisional figures.

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

Date (End of month)	Numbers employed by 1,428 firms, to nearest thousand	Percent. increase (+) or decrease (—) on previous month	Index of employment, (January 1921 = 100)
<b>1921</b>			
January	1,628,000	—	100.0
February	1,613,000	— 1.00	99.1
March	1,588,000	— 1.50	97.5
April	1,581,000	— 0.40	97.1
May	1,574,000	— 0.45	96.7
June	1,527,000	— 2.90	93.4
July	1,510,000	— 1.10	92.8
August	1,526,000	+ 1.08	93.7
September	1,545,000	+ 1.20	94.9
October	1,560,000	+ 1.01	95.8
November	1,567,000	+ 0.46	96.3
December	1,493,000	— 4.70	91.7
<b>1922</b>			
January	1,557,000	+ 4.20	95.6
February	1,565,000	+ 0.57	96.1
March	1,604,000	+ 2.50	98.5

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

Date (End of month)	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
<b>1921</b>				
January	5,417,915	10,029	64,967	12,794
February	7,240,589	74,004	82,441	31,643
March	8,280,415	196,251	45,985	47,753
April	10,389,252	236,702	68,885	49,060
May	10,109,252	279,926	74,437	60,949
June	10,275,252	270,136	42,695	79,369
July	10,409,114	216,566	28,583	85,661
August	8,715,508	127,947	4,312	65,423
September	6,141,888	86,369	3,352	24,129
October	4,507,383	49,462	5,325	20,567
November	4,256,209	31,371	1,576	11,904
December	382,618	7,810	777	4,335
<b>1922</b>				
January	303,375	7,170	1,609	991
February	303,375	2,604	1,896	1,093

In India, where unemployment is mainly a consequence of famine, the number of persons on famine relief may be taken as an indication of the extent of unemployment. The latest figures available show that the distress was considerably less in January and February than in previous months.

Table II 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 III gives information from other sources in regard to unemployment for Austria, 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 IV, and table V 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 April 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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(<sup>1</sup>) See *International Labour Review*, Vol. V, No. 4, April 1922, pp. 626 et seq.



# MIGRATION

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## Notes on Migration

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A new section has been inserted in these *Notes*, under the heading *International Action*, in which information will in future be given on proceedings or measures which concern two or more states simultaneously. In this issue of the *Review* the new section includes an account of the European Health Conference held at Warsaw, at which, in view of the danger of epidemics threatening from an influx of refugees from Russia, special health agreements between the countries most exposed were recommended; an analysis of the High Commissioner's report to the League of Nations describing his efforts to obtain a home for a certain number of Russian refugees by agreement with European governments; a description of some international agreements; and an account of the discussion both in the United States and the Netherlands on the resolutions of the International Emigration Commission.

The section on *Migration Movements* includes an international comparison of the statistics of Russian refugees as established by the High Commissioner of the League of Nations with the assistance of the International Labour Office; also the 1921 emigration and immigration statistics for Belgium, Canada, India, Federated Malay States, South Africa, Germany, Switzerland and the United States; provisional figures for overseas and overland emigration from Italy; also retrospects of population movements both for Norway, going back to 1836, and for Australia, going back to 1861.

In the section on *Government Policy and Legislation* endeavour has been made to bring out the importance of the new emigration Act in Czechoslovakia, to follow the developments of the policy of the British Dominions in regard to colonisation, and the progress of the Three per Cent. Act in the United States. Mention is also made of the following: Japanese immigration into Brazil, immigration into Bolivia, colonisation of Dutch Guiana; measures in Jugo-Slavia to regulate the transit of emigrants, and restrictions in Hungary to prevent the influx of destitute Hungarians from territories formerly Hungarian; also some information on the amnesty and repatriation to Russia of Russians who have participated in military attempts against the Russian Soviet Republic and on the entry of foreigners into Russia.

Finally, in the section on *Welfare and Protection* will be found an account of an American conference and of a conference of labour organisations in Italy at which a recommendation was accepted urging the importance of co-ordinating all emigration work in Italy.

### INTERNATIONAL ACTION

#### *Documentary Material for the Fourth International Labour Conference*

The International Labour Office has prepared a questionnaire as to improvements which might be made in compiling statistics and communicating information about migration, an item included on the agenda of the Fourth International Labour Conference. The object of this

questionnaire is to elicit the opinions of the governments as to possible solutions, and thus to enable the Office to prepare a scheme. The questionnaire is now being despatched to governments, and will be put on sale.

The International Labour Office has also prepared a study and criticism of statistical methods concerning emigration and immigration now in use in various countries, which is a contribution to the investigation of measures which may be taken to render national statistics comparable. This study will shortly be distributed to governments and will be available for the public.

#### *Discussion of the Conclusions of the International Emigration Commission*

The resolutions of the International Emigration Commission have been the subject of discussion both in the United States and the Netherlands. In the United States, the Committee on Immigration and Naturalisation of the House of Representatives at its session of 13 December 1921 heard the evidence of Miss Frances Kellor, an expert on the situation in Europe, who communicated the impressions she had gathered at the meeting of the International Emigration Commission held at Geneva in August 1921. Replying to a question put by the chairman, Mr. Johnson, Miss Kellor declared that the United States were not officially represented there in any way and that she was only able to be present at the proceedings of the International Commission in an unofficial capacity. She also stated that the Commission did not touch the volume of migration to the United States at all, and only dealt with the general question of emigration; the meeting of the Commission was essentially concerned with the protection of migrating workers. Miss Kellor submitted to the Committee the Geneva resolutions which, on the motion of the chairman, have been published in full in the report of the session which has just appeared <sup>(1)</sup>.

The Council on Unemployment of the Netherlands, with which are connected all the Dutch associations concerned in the struggle against unemployment, as well as federations of employers and workers of various political and social tendencies, assembled on 4 March at the Ministry of the Interior at the Hague under the Presidency of Mgr. Nolens, to examine the conclusions of the International Emigration Commission of the International Labour Office.

Mr. Sandberg, Director of the Dutch Emigration Association, had examined and reported on the following questions: (1) Is it necessary to regulate emigration? (2) In what details does Dutch legislation need to be completed? (3) What is the significance of the conclusions of the International Emigration Commission, and to what extent are they to be applied in the Netherlands?

The Council decided on the motion of the President to inform the International Labour Office that it approved the conclusions of the report of the Commission. The Council then discussed the question whether emigration could be considered as an effective means of reducing unemployment. An affirmative answer being given, it was decided to draw the attention of the Ministries of Labour and of Agriculture, Commerce, and Industry to the advisability of encouraging emigration by means of government subsidies, and to the utility of an

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<sup>(1)</sup> Hearings before the Committee on Immigration and Naturalisation, House of Representatives, Sixty-Seventh Congress, Second Session, Serial 1B. Washington, 1922 (pp. 88-92).

international organisation for the purpose of finding employment for emigrants <sup>(2)</sup>.

### *Convention between the Argentine Republic and Italy*

The Minister for Foreign Affairs of the Argentine Republic has recently despatched to the International Labour Office a copy of the instrument ratifying the Convention concluded on 25 March 1921 between Italy and the Argentine Republic concerning reciprocity in the treatment of Argentine and Italian workmen injured in industrial accidents. This Convention came into force in the Argentine Republic on 1 October 1921 <sup>(3)</sup>.

### *Passport Regulations*

The Governments of Mexico and the United States have concluded an agreement according to which passport restrictions between the two countries are removed.

This permission, however, is valid only for Mexicans and Americans who have resided in their own countries for a considerable time. If only a short time has elapsed since the return of a Mexican or an American to his own country, he will require a passport in order to cross the frontier. Further, this permission is only available for a temporary stay in the United States. The American Government will not as yet agree to the complete opening of the frontier, fearing a great influx of undesirable foreigners. The condition therefore still holds good that all Europeans who wish to enter the United States by way of Mexico must have resided at least two years in Mexico <sup>(4)</sup>.

The *Wiener Zeitung* of 12 April notifies the ratification by the Austrian Government of the Agreement as to passports and visas concluded at Graz on 27 January of this year between the delegates of Austria, Hungary, Roumania, Jugo-Slavia, and Czechoslovakia. This Agreement is part of that effected in consequence of, and in accordance with, the conclusions of the special Conference on passports, on customs formalities, and through tickets convened by the League of Nations at Paris in October 1920.

The Advisory and Technical Committee to the League of Nations on Communications and Transit at its last Session (Geneva, 29 March to 1 April 1922) adopted a resolution in which it states that it notes with satisfaction "that passport and custom formalities have been considerably simplified by the various governments, in conformity with the previous resolutions of the Commission, and that going even beyond these resolutions, a certain number of governments have suppressed visa formalities reciprocally as between their nationals, some of them indeed having even abolished the passport system".

### *Distribution of Russian Refugees <sup>(5)</sup>*

The League of Nations has just published a report on the work accomplished by Dr. Nansen on behalf of Russian refugees <sup>(6)</sup>.

<sup>(2)</sup> *Tijdschrift van den Nederlandschen Werkloosheids-raad*, Vol. V, No. 4, Apr. 1922.

<sup>(3)</sup> *Bollettino della Emigrazione*, Jan. 1922.

<sup>(4)</sup> *Nachrichtenblatt des Reichswanderungsamtes*, No. 6, 15 Mar. 1922.

<sup>(5)</sup> See also below under Government Policy and Legislation: *Return of Amnestied Persons to Russia*.

<sup>(6)</sup> LEAGUE OF NATIONS: *Official Journal*, Apr. 1922. *General Report on the Work accomplished up to 15 March 1922*; by Dr. Fridtjof NANSEN, High Commissioner of the League.

Immediately after his appointment Dr. Nansen, with the assistance of the International Labour Office, prepared a census of Russian refugees in all countries where their presence constitutes a problem of public importance. His object was to secure complete and reliable data as to the numbers and occupations of refugees who were without employment or means of subsistence. He then circularised various governments, requesting them to let him know whether they would be willing to receive any refugees belonging to special classes or occupations, and if so, on what terms. He received few replies to his communication; with the exception of Brazil, all the governments replied that, owing to the universal economic depression and its consequent effect upon the labour market, it was impossible for them to hold out hopes that they could find work for the refugees. The High Commissioner, however, soon found himself faced by the urgent problem of distress among refugees in Constantinople.

The first positive result achieved was the securing of an undertaking by the Czechoslovak Government to accept 5,000 agricultural labourers, 1,000 students, and a certain number of refugee children and their teachers. This decision was given by the Czechoslovak Government at the first governmental Conference in August 1921. Nevertheless, all sorts of difficulties arose, and by Christmas only 1,000 students, 2,000 peasants, and a certain number of children had arrived at their destination. At the present moment the Czechoslovak Government is not in a position to receive the remainder of the 6,000, but there are hopes that it may soon be possible to secure the carrying out of the complete programme. In addition, it is hoped that the Czechoslovak Government may be willing to consider the acceptance of a further 500 students.

In December 1921 225 children were sent to Bulgaria; the representative of the High Commissioner was later able with difficulty to find accommodation for another 1,000 children. The Bulgarian Government, towards the end of 1921, stated that it was ready to receive 9,000 refugees from the Gallipoli camp. Further, the Bulgarian Government promised to provide free transport for Russian political refugees on its railways. The Office established in Constantinople has moreover obtained from the Bulgarian Government its authority to transfer 1,000 agriculturists and their families, and, in addition, 350 children and 150 adults to Bulgaria. Negotiations for the transfer to Germany of 300 agriculturists and their families and 50 students have been made. Steps are now being taken to transfer 3,000 refugees into a country where they would be able to secure work. The Constantinople Office has been able to assist in the repatriation to their homes of a considerable number of Estonian refugees.

There should be noted further the fact that in the course of the last eighteen months a large number of refugees have crossed the Dniester into Roumanian territory. Many are of Jewish origin. With the assistance of various Jewish associations, the great majority of them were able to obtain productive work in the localities where they settled on entering Roumania. The Roumanian authorities agreed to the request of the High Commissioner, and granted to all those refugees who had an opportunity of emigrating to the United States and other countries the necessary transit visas.

The problem of the refugees in Poland, which is acute, is one in connection with which the High Commissioner has not yet been able to make much progress.

In the Serb, Croat, and Slovene State there has been established under the authority of a State Commission, which is responsible for

matters affecting refugees, a system of employment bureaux which has worked most satisfactorily. Through its services 10,000 out of the 23,000 able-bodied refugees have secured employment. The Serb-Croat-Slovene authorities have adopted the principle of distributing allowances through the employment offices, and of cutting off allowances from able-bodied refugees to whom employment is offered.

As a final solution of the problem the High Commissioner does not think that it would be either possible or just under present conditions to propose that large masses of refugees should return to their native country. He has, therefore, appealed to the governments for their fullest support in connection with the proposals which he has submitted to them in a special report concerning the legal status of the refugees, in connection with the granting of free visas for passports, transit and transport facilities, the acceptance and maintenance of Russian students, the acceptance of agriculturalists, and the establishment and working of employment bureaux.

At its session of 25 March 1922 the Council of the League of Nations passed a resolution calling the attention of governments to the necessity and urgency of taking measures with regard to the delivery of identity certificates and the granting of visas, in accordance with the proposals of Dr. Nansen. The resolution further demands of each of the governments addressed

that it should instruct its consular representatives to issue without delay and free of charge transit visas for the countries through which the refugees must pass on their way to their country of destination . . . (and) that it should give every possible assistance to the representatives of the High Commissioner in obtaining carrying-stock or other transport facilities, and the food supplies necessary to promote the transit of the refugees across this territory free of charge if possible, and if not, under the most favourable conditions.

#### *Migrations and the European Health Conference*

The Polish Government, on the invitation of the President of the Council of the League of Nations, recently convened at Warsaw under the auspices of the League a Conference of European states in order to examine the present situation in relation to epidemics and the measures which require to be taken by governments to combat the present serious danger of the spread of epidemics from Russia into Europe (?). The information contained in the reports of the Epidemics Commission of the League of Nations on which the action of the Polish Government was based has already shown that the principal cause of the spread of epidemics on the present scale lies in the displacement of considerable masses of refugees who are fleeing from the regions devastated by the famine. They point out that this exodus of refugees is still going on to a certain extent, that it will increase enormously when the end of the winter makes road travel again possible, and that it will aggravate the danger of the spread of epidemics which threatens Europe.

In view of this situation the Conference adopted a number of resolutions, and recommended particularly the introduction of comprehensive measures to deal with infectious diseases, especially the epidemics now raging in the east, these measures to contain special provisions dealing with frontier traffic (including local frontier traffic) and traffic by water.

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(?) League of Nations Resolutions adopted by the European Health Conference at its meeting in Warsaw from 20 to 28 March, 1922 (*Communiqué au Conseil et aux Membres de la Société*. C. 177. M. 96, 1922. Geneva, 31 Mar. 1922).

A further resolution recommended that, in order to secure the execution of these measures, the states concerned and directly threatened by the epidemics should as soon as possible take steps to conclude special health agreements, the terms of which will naturally differ according to the special conditions in the various states, but which will conform to the certain general principles.

#### *Conference between Poland and the United States*

Representatives of the Polish and representatives of the United States Governments have conferred at Warsaw on the question of the quota of Polish emigrants to be admitted into the United States between 1 July 1922 and 1 July 1923. The Three per Cent. Act states that in case of changes in political boundaries in foreign countries occurring subsequent to 1910 and resulting (1) in new countries the governments of which are recognised by the United States, or (2) in the transfer of territory from one country to another, such transfer being recognised by the United States, a joint estimate shall be made of the number of persons resident in the United States in 1910 who were born within the area included in such new countries or in territories so transferred, and a revision made of the population basis for each country involved in these political changes. Aliens born in any area now included in a new country shall be considered to have been born in that country, and aliens born in a territory now transferred shall be considered to have been born in the country to which such territory is now attached.

It is also stated that the American authorities have lately decided to deduct from the Russian quota the number of immigrants coming from certain Polish districts adjacent to Russia. The negotiations which are being conducted are chiefly concerned with the request made by the Polish Government for the incorporation into one item of all the quotas limiting the number of dependents admissible into the United States from various Polish territories.

#### MIGRATION MOVEMENTS

##### *International Census of Russian Refugees*

The annexed tables show the numbers of Russian Refugees distributed throughout Europe and, as far as ascertainable, their occupations. These tables are taken from the census which was made by the High Commissioner for Russian Refugees of the League of Nations, Dr. Nansen, in collaboration with the International Labour Office. The High Commissariat, through a specially appointed liaison officer, keeps in close touch with the International Labour Office, which advises in technical questions relating to unemployment, emigration, labour exchanges, and so forth. The taking of the census was entrusted to specially appointed delegates of the High Commissioner in the countries concerned. It was attended by many difficulties, due partly to the suspicious nature of the refugees themselves, who seemed to see in it obscure political motives, and partly (in countries like Poland, Germany, Roumania, and Finland) to the constant fluctuations in numbers. These fluctuations were especially noted in Poland and Germany, where the frontiers are open and police control is singularly inadequate. The figures for Germany, owing to the lack of organisation in that country, relate to Berlin and district only. The number of refugees there is probably about 600,000, but is continually changing. The same remarks apply with even greater force to Poland; the figures given are obtained

from Russian relief organisations. The figures for Roumania relate to Jews only and were taken, with great care, by the Jewish organisations working with Dr. Nansen's delegate ; as the refugees in Roumania are almost exclusively Jews the figures may be taken to show the condition of affairs in that country. For Finland the complete figures have not yet been received, but from information obtained from the Finnish Red Cross it is estimated that there are 36,000 refugees. In Constantinople the census was made with very great care by Dr. Nansen's delegate, with the help of the British, French, and Italian Allied Commissioners and the local Russian relief organisations.

CENSUS OF RUSSIAN REFUGEES

Country	Male	Female	Children	Total
Constantinople	15,614	5,364	2,898	23,876
Cyprus	367	142	43	552
Czechoslovakia	3,462	1,254	300	5,016
Egypt (Ismailia and Alexandria)	1,492	364	198	2,054
Estonia	4,864	2,420	1,833	9,117
Germany (camps)	2,682	476	383	3,541
Hungary	—	—	—	1,623
Malta	15	20	6	41
France	—	—	—	9,149
K. of the Serbs, Croats, and Slovenes	20,318	9,682	—	30,000
Poland	42,500	25,500	17,000	85,000
Roumania (Jews)	3,552	3,803	4,008	11,363
Greece (camp at Salonica)	840	218	91	1,149
Bulgaria	28,165	3,171	1,706	33,042
Finland	—	—	9,000	36,000
Austria	287	265	129	681
Total				252,204

LIST OF UNEMPLOYED RUSSIAN REFUGEES ACCORDING TO OCCUPATIONS

<i>No.</i>	<i>Chief Trade Groups</i>	
I.	Fishermen	144
II.	Agriculturists	7,233
III.	Skins, Leather & Leather substitutes (not Boots and Shoes)	76
IV.	Textile Goods & Articles of Dress	1,135
V.	Food, Drink, and Tobacco	272
VI.	Wood and Furniture	404
VII.	Paper, Printers, Bookbinders, Photographers, etc.	157
VIII.	Building, Bricklaying, Stone, & Slate	154
IX.	Unskilled Industrial Workers	1,221
X.	Painters & Decorators (not Pottery)	160
XI.	Gas, Water, and Electrical Undertakings (not enumerated elsewhere)	188
XII.	Transport and Communication	2,166
XIII.	Commerce, Finance, & Insurance (excluding Clerks)	2,005
XIV.	Public Administration (excluding Professional Occupations and Typists)	1,088
XV.	Professional Occupations (excluding Clerical Staff), Medical and Legal Professions, etc.	4,845
XVI.	Personal Service (including Institutions, Clubs, Hotels, etc.)	324
XVII.	Clerks and Draughtsmen (not Civil Service or Local Authorities), Stenographers, Typists	4,172
XVIII.	Warehousemen, Storekeepers, and Packers	17
XIX.	Stationary Engine Drivers, Dynamo and Motor Attendants	329
XX.	Other and undefined Workers	16,940
	Total	43,028

*The British Empire  
Canada*

The total number of immigrants to Canada during 1921 was 100,413, as compared with 147,502 in 1920. Of these 43,810 came from Great Britain (75,807 in 1920), 32,573 from the United States (48,866 in 1920), 24,030 from other countries (22,829 in 1920) <sup>(8)</sup>.

*Australia*

The total number of immigrants into Australia from 1861 to 1920 was 1,015,066. Nearly half, or 499,682, went to New South Wales; nearly one-third, or 307,679, went to Queensland, and 188,772 went to Western Australia; 582,146 were men and 432,920 women. If the net immigration is compared with the gain to the population by excess of births over deaths (3,251,668), it will be seen that no less than 23.8 per cent. of the increase in population arose from immigration.

In 1920, of a total of 104,351 immigrants, 95,879 were British (including 11,546 returned troops and nurses), 1,753 Chinese, and 1,698 from North America, the remainder made up of other nationalities <sup>(9)</sup>.

The following table shows the number of nominated and selected immigrants who arrived in the Commonwealth during the years 1911 to 1920 <sup>(10)</sup>. Nominated immigrants are those nominated by persons resident in the Commonwealth, and selected immigrants are those originally recruited by the Commonwealth overseas.

Year	Nominated			Selected			Total
	Males	Females	Total	Males	Females	Total	
1911	9,930	9,230	19,160	13,592	7,044	20,636	39,796
1912	14,738	15,744	30,482	9,942	6,288	16,230	46,712
1913	11,232	14,627	25,859	7,570	4,016	11,586	37,445
1914	5,036	6,573	11,609	6,412	2,784	9,196	20,805
1915	1,437	2,408	3,845	685	1,266	1,951	5,796
1916	342	792	1,134	79	184	263	1,397
1917	121	317	438	24	42	66	504
1918	79	317	426	—	—	—	426
1919	55	148	203	29	13	42	245
1920	2,898	3,089	5,987	1,716	1,356	3,072	9,059

The following figures show the total immigration into the Commonwealth for the years 1912-1920 and the number of naturalisation certificates granted during the same period.

<sup>(8)</sup> *Labour Gazette* (Canada), May, Sept., and Nov. 1921, and Feb. 1922.

<sup>(9)</sup> *Official Year Book of the Commonwealth of Australia*, 1901-1920.

<sup>(10)</sup> *Quarterly Summary of Australian Statistics*, Sept. 1921.

<sup>(11)</sup> *Official Year Book of the Commonwealth of Australia*, 1901-1920.



Year	Immigration	No. of natural. certif. granted	Year	Immigration	No. of natural. certif. granted
1912	163,990	1,945	1917	53,036	445
1913	140,251	2,291	1918	77,169	261
1914	110,701	4,272	1919	223,736	295
1915	70,436	1,602	1920	104,351	629
1916	59,140	842			

### South Africa

According to a communication of the Minister of the Interior in the House of Assembly<sup>(12)</sup> the following figures represent the statistics of immigration for the calendar year 1921 : from Great Britain, 16,784 ; South America, 31 ; United States, 394 ; Austria, 7 ; Belgium, 941 ; China, 63 ; Holland, 431 ; France, 152 ; Germany, 277 ; Greece, 74 ; Italy, 194 ; Japan, 5 ; Spain, 10 ; Portugal, 149 ; Roumania, 114 ; Russia, 1,416 ; Denmark, 38 ; Switzerland, 120 ; Turkey, 9 ; Scandinavia, 171 ; other countries, 600 ; total, 21,680.

In reply to the question as to how many persons were naturalised as British subjects during last year, the Minister of the Interior gave the following figures : Russians, 701 ; Germans, 402 ; Italians, 40 ; Austrians, 34 ; Danes, 20 ; French, 5 ; Turks, 19 ; Swiss, 17 ; Greeks, 41 ; Dutch, 22 ; Americans, 10 ; total, 1,311.

### Federated Malay States

The Indian Immigration Committee, meeting in Kuala Lumpur on 18 November last year, published the following figures of the immigration and emigration of Indians from 1 January to 31 October 1921, together with figures for the corresponding period in the preceding five years.

Year	Arrivals				Departures	
	State-aided		Other		adults	minors
	adults	minors	adults	minors		
1917	64,685	5,713	8,895	724	47,230	1,850
1918	43,089	5,250	6,682	571	44,692	1,974
1919	67,957	7,604	10,245	1,375	38,561	1,701
1920	59,411	7,137	11,972	1,680	46,261	2,031
1921	13,943	798	23,634	2,414	50,805	3,122

According to the chairman of the Committee, about 70 per cent. or 36,000 of adults leaving in 1921 were labourers, and only 13,900 of those entering belonged to this class, so that there was a net loss of about 22,000 labourers<sup>(13)</sup>.

### Germany

Statistics published by the Federal Office of Statistics<sup>(14)</sup>, (which, however, are not absolutely complete), show a total of 23,451 persons

<sup>(12)</sup> *Cape Times*, 15 Mar. 1922.

<sup>(13)</sup> *Swadharma*, 5 Mar. 1922. Madras.

<sup>(14)</sup> *Wirtschaft u. Statistik*, No. 5, 1922, p. 174.

emigrating by sea from Germany during 1921, of whom 12,750 are known to have been of male, and 9,399 of female, sex. Of these emigrants 18,184, or 77.5 per cent., embarked at Hamburg, Bremerhafen, or Emden, and 5,267, or 22.5 per cent., embarked at Amsterdam, Rotterdam, or Antwerp. The corresponding figures for 1920 were 869, or 10.3 per cent., and 7,589, or 89.7 per cent.

While before the war North America, which, for instance, in 1913 attracted 79.1 per cent. of German emigrants, was the chief country of destination, now the tendency is increasingly to go to South America, especially to Brazil and the Argentine Republic; the central American states of Cuba and Mexico also attract considerable attention. The following analysis gives figures in detail.

<i>German emigrants to</i>	1913	1920	1921
European countries	.68	1	770
North America	20,430	1,429	9,080
Central America	—	231	992
Brazil	140	131	6,872
The Argentine Republic	1,085	588	2,056
South America (State not mentioned)	3,729	6,078	3,290
Africa	32	—	391
Australia	359	—	—

In 1921, therefore, the percentage of German emigrants proceeding to North America had sunk to 38.7, whereas the percentage proceeding to South American states was 52.1 (of whom 29.3 per cent. at least are known to have gone to Brazil), as against 19.2 per cent. proceeding to that continent in 1913. How far German emigration to Africa represents the return thither of Germans formerly resident in the German colonies, is not known.

The number of male emigrants, generally speaking, was in excess of the number of female emigrants, sometimes markedly so; but of those proceeding to the United States only 3,939 were men as against 4,134 women.

Information as to the occupations of emigrants is supplied only for those embarking at German ports. The occupation principally represented was agriculture and forestry, which was stated to be the occupation of 7,585 persons (including dependents). Industrial occupations were listed for 3,190 persons, commerce and the hotel trade for 1,688, domestic service and similar employment of a less regular kind for 793, and the liberal professions for 782; only 87 mentioned mining as their occupation, a fact which can be accounted for by the strong home demand in that industry. There were 2,360 persons without an occupation or who failed to indicate their occupation.

The total number of emigrants of other nationalities who embarked at German ports in 1921 was 19,422. Of this number 6,883 came from Czechoslovakia, 3,190 from Poland, 2,771 from Austria, 1,824 from Jugo-Slavia, 1,423 from Roumania, 1,391 from Hungary, 1,023 from Lithuania, 473 from Russia, and 444 from other countries. Their principal country of destination was the United States, to which 18,012 persons were proceeding; 702 (including 527 Austrians) were going to Brazil, 540 to the Argentine Republic, and 108 to British South West Africa. Of these non-German emigrants 13,414 embarked at Hamburg, 6,003 at Bremerhafen, and 5 at Emden. The number of embarkations at German ports, therefore, shows a large increase over those of the previous year; at Hamburg, for instance, only 9 non-German emigrants embarked in 1920.

Complete statistics are not available as to immigration into Germany after the war. All that is known is that the numbers were very high and reached something like one million persons. For immigration from overseas statistics are available for the ports of Hamburg and Bremen. In 1921 the number of travellers disembarking at Hamburg was 51,760, while 13,104 immigrants from North America alone disembarked at Bremen. Not all these persons were true immigrants, as may be inferred from the fact that over 20 per cent. travelled first class. By far the larger number of those disembarking at Hamburg, as at Bremen, came from North America; actually, of the 51,760, 40,162 came from the United States, 270 from Canada, 1,010 from Brazil, 29 from the Argentine, and 50 from Mexico and the West Indies, or a total of 41,521 (80 per cent.) from America generally. The number of those coming from Great Britain was 4,082, from Norway 2,761, from Africa 1,415. Immigration was extremely unequal over the months of the year; the largest number of immigrants arrived during the summer months. Whereas an increase in the number of first-class passengers may be noticed as compared with the figures for 1920 (at Hamburg an additional 3,844 persons), the number of steerage passengers fell (at Hamburg 38,210 in 1921 as against 39,383 in 1920). This seems to show that a considerable number of passengers were on a passing visit <sup>(15)</sup>.

### Italy

The Italian Department of Emigration has published for the year 1921 provisional statistics on oversea emigration from Italy; also statistics on overland emigration <sup>(16)</sup>. A comparison with the corresponding figures for 1920 <sup>(17)</sup> shows that oversea emigration has decreased from a total of 211,227 persons to a total of 194,320 persons. The figures for the first six months of the year show a rise (128,227 in January to June 1921 as compared with 92,555 for January to June 1920), but a marked drop occurs in those for the last six months (66,093 for July to December 1921 as compared with 118,672 for July to December 1920). It

OVERSEAS EMIGRATION FROM ITALY IN 1921 BY COUNTRIES OF DESTINATION <sup>(1)</sup>

Months in 1921	Total emigrants	Countries of destination								
		Canada	United States	Central America	Brazil	Argentina	Uruguay	Africa <sup>(2)</sup>	Australia	Other countries
Jan.	27,099	132	21,704	460	850	3,850	93	15	11	2
Feb.	23,965	108	20,066	—	611	3,044	30	2	90	8
Mar.	19,060	88	14,444	—	854	3,540	61	4	59	10
Apr.	27,267	460	24,070	—	482	2,183	9	8	55	—
May	25,941	544	21,281	268	1,018	2,726	43	11	—	50
June	4,895	182	2,091	22	662	1,687	83	7	150	11
July	8,702	429	6,608	—	750	899	14	1	1	—
Aug.	7,370	258	4,366	157	487	1,926	65	13	93	5
Sept.	11,581	161	7,149	—	546	3,548	87	5	84	1
Oct.	15,927	139	6,239	5	1,156	7,900	135	5	343	5
Nov.	12,831	178	5,697	3	1,391	5,354	97	4	85	22
Dec.	9,682	1	3,902	223	1,646	3,748	54	22	83	3
Total	194,320	2,680	137,617	1,438	10,453	40,385	779	97	1,054	117

<sup>(1)</sup> Provisional figures only. <sup>(2)</sup> Excluding the Mediterranean coast.

<sup>(15)</sup> Ibid.

<sup>(16)</sup> *Bollettino della Emigrazione*, Jan. 1922.

<sup>(17)</sup> Ibid., Feb. 1921.

## OVERLAND EMIGRATION FROM ITALY IN 1921 BY COUNTRIES OF DESTINATION

Months in 1921	Total emigrants	France and Monaco	Switzerland	Austria, Czechoslovakia, and Hungary	Germany	Belgium, Holland, and Luxembourg	Great Britain	Spain and Portugal	Balkan states and Yugoslavia	North Africa	Other countries
Jan.	3,437	2,157	466	108	54	84	173	36	80	242	37
Feb.	3,342	2,106	399	89	50	105	175	27	78	288	25
Mar.	4,445	2,651	402	262	129	92	210	46	437	205	11
Apr.	6,993	3,377	608	959	96	241	198	56	1,166	277	15
May	5,351	2,969	533	444	111	136	168	30	671	247	42
June	4,856	2,836	730	413	76	142	116	13	351	152	7
July	5,237	2,584	1,483	276	137	122	65	50	359	146	15
Aug.	5,054	3,034	574	517	82	194	96	9	384	156	8
Sept.	5,593	3,580	430	235	87	360	156	28	457	252	8
Oct.	6,343	3,972	289	327	100	433	202	16	380	610	14
Nov.	5,638	3,763	252	299	94	318	136	19	338	409	10
Dec.	4,557	3,150	357	162	69	238	91	33	159	254	8
Total	60,846	36,179	6,543	4,091	1,085	2,465	1,786	363	4,896	3,238	200

is obvious to suggest as the cause the effects of the Three per cent. Act of the United States; while the number of persons proceeding to the United States from Italy was 103,656 during the first six months of the year (as against 73,800 in 1920), it was only 33,961 during the last six months (as against 95,579 in 1920).

Overland emigration from Italy also shows a drop for the year 1921; only 60,846 persons emigrated in this way as compared with 153,717 in 1920. The two chief countries receiving Italian immigrants, France and Switzerland, show, the first a drop from 119,831 persons entering from Italy in 1920 to 30,179 persons entering in 1921, and the second a drop from 19,931 persons so entering in 1920 to 6,543 persons in 1921 <sup>(18)</sup>.

### Belgium

The Emigration Commission of the Belgian Government has published statistics of emigration through the port of Antwerp for 1921. The number of emigrants proceeding direct to their destination reached 39,626, and that of emigrants proceeding indirectly reached 17,101, of which totals Belgians accounted for 1,315 and 885 respectively.

The following are the numbers of direct emigrants of each of the principal nationalities.

Poles	23,817	(9,323 men and 14,494 women)
Roumanians	3,565	(1,777 men and 1,788 women)
Czechoslovak	3,337	(1,696 men and 1,641 women)
Russians	3,116	(1,119 men and 1,997 women)
Hungarians	1,331	( 575 men and 756 women)

Attention should be drawn to the considerable proportion of women among the direct emigrants in transit: 22,087 women against 16,224 men.

<sup>(18)</sup> The data on which these estimates are based are the slips (*espatrio*) which are detached by officials at the frontiers from emigrants' passports. These figures do not give the total number of emigrants, as they fail to include those furnished with the old type of passport, which has no slip, and also those who leave Italy by the less important routes, where no control has as yet been established.

Among the latter are 5,444 male children under 16 years, so that men over 16 years, who are the real emigrants, are only 10,780 out of a total of 38,311.

Among the indirect emigrants passing through Antwerp, the proportion of adult men is somewhat larger: out of 16,216 there were 7,898 women and 8,318 men, 2,144 of whom had not completed their fifteenth year.

The following were the occupations of adult emigrants.

	<i>Direct</i>		<i>Indirect</i>	
	<i>Belgians</i>	<i>In transit</i>	<i>Belgians</i>	<i>In transit</i>
Agriculture	334	2,847	272	3,298
Commerce and Industry	13	1,012	9	333
Labourers	165	12,975	52	3,897
Various	186	2,232	160	1,357
Unclassified: Men	2	74	6	6
Women	271	7,838	192	2,979

The following were the countries to which emigrants proceeded.

	<i>Direct</i>		<i>Indirect</i>	
	<i>Belgians</i>	<i>In transit</i>	<i>Belgians</i>	<i>In transit</i>
Canada	711	7,934	198	4,651
Other countries of North America	519	30,292	648	10,779
South America	13	85	39	789

### *Switzerland*

In pre-war years the number of emigrants, passengers and foreign re-emigrants passing through Switzerland, despatched by Swiss agencies, was continually increasing; in 1913 it was more than 130,000. During the war the transport of foreign emigrants through Switzerland fell to a minimum, and even by 1921 it was far from having regained its former importance.

In 1921, according to the report of the Federal Council, Swiss agencies despatched:

Swiss emigrants (of whom 1,027 were foreigners who before their departure lived in Switzerland)	7,129
Foreign emigrants	2,753
Passengers	2,060
Foreign emigrants in transit	3,779
Passengers with pre-paid tickets for America	1,896
Total	17,617

It has not been possible to work out the number of re-emigrants despatched by agencies from west to east.

Of the Swiss emigrants 5,567 embarked at French ports; 538 at Italian ports; 356 at Belgian ports and 342 at Dutch ports; 4,911 landed in the United States, 637 in the Argentine Republic, and 496 in Brazil. Their occupations were as follows:

Agricultural workers	2,271
Industrial workers	1,841
Commercial employees	928
Domestic servants	325
Hotel servants	567
Teachers	187
In other occupations	1,010

## Norway

In view of the proposed revision of the Emigration Act, the Ministry for Social Affairs (*Socialdepartementet*) has prepared a statistical survey of Norwegian emigration. The survey has been printed as a separate volume. No first-hand investigation has been made, but the statistical material at hand has been put together and analysed and at the same time an attempt has been made to throw some light on the reasons for emigration and its effect on the population.

For the period 1836 to 1915 the following table gives, in quinquennial periods, a summary of the extent of overseas emigration, immigration, the final excess of emigrants over immigrants, and the relation of each of these figures to the average native population.

Year	Actual numbers			Number per 10,000 inhab. aver. native population		
	Overseas emigration	Immigration	Excess of emigrants	Overseas emigration	Immigration	Excess of emigrants
1836-1840	1,200	3,877	2,677*	2.0	6.4	4.4*
1841-1845	5,000	3,880	1,120	7.8	6.1	1.7
1846-1850	12,000	864	11,136	17.6	1.3	16.3
1851-1855	20,270	865	19,405	28.1	1.2	26.9
1856-1860	15,800	6,902	8,898	20.4	8.9	11.5
1861-1865	23,550	6,744	16,806	28.6	8.2	20.4
1866-1870	74,403	5,434	68,969	86.4	6.3	80.1
1871-1875	45,142	5,371	39,771	51.0	6.1	44.9
1876-1880	40,244	4,259	35,985	42.9	4.5	38.4
1881-1885	105,704	723	104,981	109.7	0.7	109.0
1886-1890	80,984	824	80,160	81.9	0.8	81.1
1891-1895	61,017	19,091	41,926	59.7	18.7	41.0
1896-1900	33,837	24,276	9,561	31.2	22.4	8.8
1901-1905	103,195	14,021	89,174	90.3	12.3	78.0
1906-1910	87,663	17,324	70,339	74.6	14.8	59.8
1911-1915	44,552	23,035	21,517	36.4	18.8	17.6
	754,561	137,490	617,071			

\* Excess of immigrants.

During the fifty years from 1866 to 1915 28.53 per cent. of all the emigrants have been from the towns and 71.47 per cent. from the rural districts. The proportion has varied throughout the period. Thus up to and including 1886 to 1890 the proportion of emigrants from the towns was continually increasing; with only a small interruption at the end of the seventies, it rose from 13.13 per cent. in 1866 to 1870 to 34.34 per cent. in 1886 to 1890. For some time after this the emigration from the towns decreased steadily and comparatively slowly to 27.11 per cent. in 1896 to 1900. During the first ten years of this century there was again a small increase, which during the last five years was followed by a small decrease, so that the proportion of those emigrating from the towns now amounts to 32.44 per cent.

The largest number of those emigrating were between the ages of

15 and 30 and more especially between the ages of 15 and 25. This was particularly the case with men, as not less than 49 per cent. of the male emigrants were between 15 and 25, while about 40 per cent. of the women were between those ages.

If an examination be made of the groups of occupations to which the male emigrants over 15 years of age belong, it will be seen that the group comprising agriculture, stock-breeding, forestry, and fishery supplies a continually increasing part of the total emigration, namely, from about 13 per cent. in 1876 to 1880 to 45.75 per cent. in 1911 to 1915.

As regards the industry and mining group, the percentage of emigration of this group first decreased from 14.8 per cent. in 1876 to 1880 to 12.6 per cent. in 1886 to 1890, but during later years increased to about 25 per cent. The percentage of the group comprising commerce, trade, and communications was for a long time continually increasing and reached a maximum in 1896 to 1900 of 23.3 per cent.; for the period to 1915 the percentage is 22.6.

### China

The maritime customs authorities publish annually the number of aliens resident in China. We give below the figures for 1920, and, for purposes of comparison, those for 1913 and 1919. The drop in the figures between 1919 and 1920 is principally due to the decrease in the numbers of Japanese and Russian residents. There are now more American residents in the country than in previous years, but fewer English and fewer French residents <sup>(19)</sup>.

<i>Nationality</i>	<i>1913</i>	<i>1919</i>	<i>1920</i>
Japanese	80,219	171,485	153,918
Russian	56,765	148,270	144,413
English	8,966	13,243	11,082
American	5,340	6,660	7,269
French	2,292	4,409	2,753
Portuguese	3,486	2,399	2,282
German	2,949	1,335	1,013
Belgian	178	391	592
Danish	354	546	545
Italian	355	276	504
Swedish	292	637	464
Dutch	161	367	401
Norwegian	249	349	373
Spanish	136	272	285
Austrian	419	27	24
Hungarian	21	11	8
Others	1,645	537	143
Total	163,827	350,991	326,069

### United States

During the six months' period ending 31 December 1921, figures for which have become available <sup>(20)</sup>, the number of immigrant aliens who entered the United States was 200,121, as against 137,878 emigrant aliens who departed during the same period. The number of males departing

<sup>(19)</sup> *Bollettino della Emigrazione*, Jan. 1922.

<sup>(20)</sup> UNITED STATES BUREAU OF LABOUR STATISTICS: *Monthly Labour Review*, Mar. 1922.

was actually in excess of the number entering, namely, 100,663 and 93,260 respectively. Excess of immigration over emigration is shown among others in the case of Jews, Germans, Scots, English, Irish, Mexican, French, and Scandinavian, with a reverse movement in the case of Poles, Spaniards, South Italians, and Portuguese. Too much significance should not be given to this, as the figures cover only six months of the year.

The principal countries from which the immigrants came were Italy, including Sicily and Sardinia (36,829), Poland (26,225), British North America (21,979), United Kingdom (21,140), Czechoslovakia (10,728), Germany (9,752), Russia (7,004), Mexico (6,737), Serb, Croat, and Slovene State (5,913), Roumania (5,758) and Hungary (5,535).

#### GOVERNMENT POLICY AND LEGISLATION

##### *Oversea Settlement in Australia*

The Premier of South Australia, Mr. H. N. Barwell, in a speech which he made at London, stated that South Australia was ready to allow 5,000 settlers to enter during the next two years, until such time as circumstances would permit her to receive more <sup>(21)</sup>. Arrangements were also completed on 17 March in London at the Office of the Agent-General for South Australia to put into immediate operation a scheme for placing 6,000 British lads on farm lands in South Australia. About 8,000 applications for inclusion in this scheme have been received. Applicants will be required to find a part of their passage money and must agree to be apprenticed to a farmer for from one to three years. The amount to be contributed by the boy towards the passage is £10 out of a total of £38. The South Australian Government will contribute £12 outright, and advance the other £16, to be repaid by the boy by deductions from his wages during the time of his apprenticeship. The boys will be apprenticed to farmers, horticulturists, wine growers, and sheep farmers, and will be under the official guardianship of the South Australian Government during the whole time of their apprenticeship <sup>(22)</sup>.

A report on the Crown lands available for the immigrants of Western Australia in connection with the common plan of action of the Empire and Australia <sup>(23)</sup> draws attention to the existence of suitable lands in the south-west of the State, having a rather low rainfall, but very well wooded and situated to the south and to the west of Perth. By the terms of the projected agreement, known as "The Triangular Scheme", the British Government and the Australian Federal Government assume the responsibility of finding settlers, while the Government of Western Australia undertakes to find the land <sup>(24)</sup>.

It is announced that Sir George Fuller, the new Premier of New South Wales, is also favourably disposed to an active policy in immigration and is willing to follow the example set by Western Australia.

The State of Queensland has until now been following an independent policy in immigration. Having obtained a loan of £2 millions from the

<sup>(21)</sup> *Morning Post*, 1 Apr. 1922.

<sup>(22)</sup> *Ibid.*, 18 Apr. 1922.

<sup>(23)</sup> See the *International Labour Review*, Vol. V, No. 5, May 1922, p. 810.

<sup>(24)</sup> *Times*, 15 Apr. 1922.



United States, the Queensland Cabinet on 14 February definitely decided to start work on the scheme for the settlement and development of the upper basin of the Burnett river. The Premier, Mr. Theodore, said that authority had been given to the Minister for Railways to proceed with the construction of three new railway lines, and the Minister for Lands had been authorised to proceed with the official opening up of the contemplated area at the earliest opportunity, so as to make it available for settlement as soon as possible. The Minister for Lands furnished details. The area involved is almost three million acres, comprising excellent land for crops, dairying, mixed farming, and pastoral operations. The provision is for 5,000 settlers, which will probably increase the population of the district by about 20,000 people; but there is plenty of room for further expansion, as there are great areas of land on each side of the tract included in the present project.

#### *Health of Immigrants arriving in New Zealand*

The Director-General of Military Medical Services, Sir Donald McGavin, states that according to reports received from private war relief associations a large number of men demobilised from Imperial forces arriving in New Zealand are physically unfit. Hospitals and sanatoria have already taken in a certain number. Stricter medical supervision of immigrants before their departure is demanded, and the New Zealand Government has promised to open an enquiry <sup>(25)</sup>.

#### *Application of French Legislation in Alsace*

A Decree replacing German emigration legislation by French legislation in the restored provinces of the Upper Rhine, Lower Rhine, and Moselle, was signed on 28 February last by the President of the Republic <sup>(26)</sup>. The object of this Decree is to unify the regulations applicable to emigrants crossing France, and to bring emigration agencies throughout the territory under government control.

Emigration agencies authorised by previous legislation will have to make new applications in accordance with the provisions of the French Act, and the security deposited by them will be duly repaid to them according to the conditions laid down in the local legislation.

#### *Recruiting of Italian Labour for Employment outside Italy*

In November 1921 a national Consortium for Emigration and Employment (*Consortio nazionale di Emigrazione e Lavoro*) was founded, with a capital of two and a half million lire; this Consortium was based on the results of preliminary enquiries conducted by the Commissioner-General for Emigration, Mr. Michelis, and is supported by the big banks and shipping companies. The principal object of the foundation is to set on foot Italian undertakings abroad which shall employ Italian labour. Since the beginning of the year it has been responsible for the publication of a special news sheet for emigrants under the name of the *Informatore per l'Emigrante*, containing official announcements of interest to Italian emigrants presented in brief form and so as to be easily understood.

#### *Emigration from Austria*

Persons wishing to emigrate from Austria have for some time past had the opportunity of obtaining accurate advice gratis. With a view

<sup>(25)</sup> *Times*, 30 Mar. 1922.

<sup>(26)</sup> *Journal officiel*, 12 Mar. 1922.

to compelling all intending emigrants to make use of the advising offices, the Government has now issued orders that the granting of a passport shall be made contingent on having consulted one of these offices <sup>(27)</sup>.

*The Czechoslovak Emigration Act of 15 February 1922*

The new Emigration Act in Czechoslovakia <sup>(28)</sup> fulfils the most up-to-date demands made on behalf of the protection of emigrants, and attempts to adapt the recommendations of the International Emigration Commission to national requirements and to carry them out in practice. It gives the following definition of the term "emigrant" : "An emigrant under the terms of this Act is any person who proceeds from the territory of the Czechoslovak Republic to another country with the purpose of there seeking his living or with the purpose of not returning ; also any member of his family who shall accompany him or follow him ". Apart from a brief reference to the National Defence Act, the Emigration Act places no restriction on emigration except in the vital interests of the emigrant himself. Certain classes of persons, for instance, are defined and forbidden to emigrate ; these correspond with those who are excluded by the immigration laws of other countries, e.g. persons too old to work, who, on arrival, would find themselves without means of support.

All protective measures are based on a system of special emigration passports, and are, in general, directly handled by the state, although the assistance of philanthropic associations is contemplated and regulated.

With a view to protecting the emigrant, recruitment of individuals for emigration to countries outside Europe, whether with a view to taking up land or to accepting employment, is prohibited. Exceptions may be allowed where due regard has been had to the interests of the emigrant, and where both his nationality and his right to return are guaranteed to him ; such exceptions are allowed by way of administrative regulation.

The clauses on the engagement of Czechoslovak nationals in European countries are modelled on the Washington unemployment Recommendation ; they enforce collective recruitment, the co-operation in both countries of the public employment exchanges, and the mention of a definite person or body as employer. Again, in the spirit of the Resolutions of the International Emigration Commission, the text of the Act runs : "The employment contract must guarantee that there is neither strike nor lock-out in the undertaking and that wage and labour conditions shall be accorded to the immigrant worker which shall be at least as favourable as those accorded to nationals who are of the same degree of skill, and that these conditions shall continue during the whole period of the contract ". A new and very practical clause is also that which enjoins that, in the matter of terminating an employment contract, the immigrant worker shall have rights equal to those granted to the national.

For suppressing secret propaganda, the number of 'representatives' of foreign shipping companies, and the number of licensed emigration offices, is restricted. 'Representatives' may only receive fixed salaries ; they may take no sort of commission, nor may they act

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<sup>(27)</sup> *Arbeiterzeitung*, 7 Apr. 1922. Vienna.

<sup>(28)</sup> *Sbírka zákonů a nařízení státu československého* (*Sammlung der Gesetze u. Verordnungen des tschechoslowakischen Staates*), No. 23, published 13 Mar. 1922.

for any other transport agency. The transport agencies and their 'representatives' may not make use of the services of any middlemen or of any persons operating outside their licensed offices. Should the Ministry of Social Welfare give permission for the employment of persons to conduct parties of emigrants, such persons must wear a badge which can be easily recognised and must be provided with a licence. Transport agencies must at all times be able to produce a list of their employees and at once dismiss an employee when requested by the Ministry. They must undertake to keep their books and correspondence for five years, reckoning from the date of the last entry, and to produce them on request. Apart from announcements the contents of which are strictly controlled, transport agencies are forbidden to enter into negotiations with any person until such person shall himself have approached them. Principals are equally liable with 'representatives' for any contraventions of the law of which the latter may have made themselves guilty.

The regulations on the transport of emigrants are designed to cover the usual abuses. The Czechoslovak consular representatives at ports of embarkation abroad must be informed of the intended arrival of emigrants in good time. They will then note the carrying out of regulations dealing with accommodation and food arrangements before embarkation and on board ship, with medical examination, with sanitary and other measures, and with the persons appointed to conduct parties of emigrants. Emigrants' hostels situated at the frontier or at the collecting centres will also be subject to control and, if necessary, be suppressed.

The punitive clauses as to solicitation to emigrate in general, risk to young persons under 18 years of age, and the white slave traffic appear to be drastic in their terms. They conform to the international Conventions on the white slave traffic. The transport of emigrants shall be prohibited in cases where some foreign state or foreign corporation is itself assisting or proposing to assist such emigration; the object of this is to protect the emigrant against incitement. The international policy of the Government is best characterised in the following clause: "The Government is empowered to conclude treaties on emigration and immigration with other states on the basis of mutual obligations and to carry them out, with a view to the execution of the clauses of this Act and of the regulations enforcing it on the territory of foreign states".

Respecting transit through the country the text of the Act here runs: "The Government is empowered, with a special view to the relief of distress, public security and health, to issue the necessary instructions regulating the entry and transit of migrants from other states travelling through Czechoslovak territory."

### *Emigration Policy in Jugo-Slavia*

Under the terms of the new emigration Act of 1922 Jugo-Slav emigrants may only embark at Jugo-Slav ports, i.e. at Ragusa and Martinschitz (between Susak and Buccari). A project has been set on foot for constructing at Martinschitz a special emigration port with adequate emigration hostels; plans are already in the hands of the Transport Ministry. The cost would amount to 37 millions of *dinar*. The port would be constructed on the most up-to-date principles and would have a large number of quays, offering convenient accommodation. The proposal is to come before the Council of Ministers at an early date <sup>(29)</sup>.

<sup>(29)</sup> *Berliner Tageblatt*, 14 Apr. 1922.

*Restrictions on Immigration into Hungary*

A Government Order, dated 1 April of this year <sup>(30)</sup>, continues until 27 July the prohibition against immigration from the territories separated from pre-war Hungary, which has already been in force for many months <sup>(31)</sup>. The frontier control stations are not permitted to authorise the entry of immigrants; railway officials at the frontier are prohibited from passing in trains carrying immigrants unless with special permission from the Government. The explanation of this prohibition lies in the large numbers of those wishing to immigrate who, being Hungarians, are unable to find any means of existence in the new neighbouring states and have been expelled or have left their former homes for some other cause. The last report of the Hungarian Bureau for Refugees mentions 139,390 persons as entering present Hungarian territory from Roumania, 56,657 from Czechoslovakia, and 37,456 from Jugo-Slavia <sup>(32)</sup>. The support of these refugees is a great burden in the state; their mass movement jeopardises the economic situation and public security; the housing problem, which is already quite difficult enough, is becoming a source of positive danger; the Hungarian authorities state that thousands of refugees are still living in railway carriages.

*New Passport Regulations for Foreigners entering Russia*

A Decree of 20 October 1921 regulating the entry of foreigners into the territory of the Russian Socialist Federative Soviet Republic places the right of issue of permits for entry into Russia exclusively in the hands of the Russian Representatives in foreign countries, who for this purpose will put a special visa on passports. Persons wishing to travel to Russia must present their personal papers in the originals to such Representatives, in accordance with the terms of the regulations drawn up on the point by the People's Commissioner for Foreign Affairs. Persons entering the territory of the Soviet Republic secretly and without proper authorisation will, if arrested, be brought before a popular court and, in the presence of six assessors and later of a judge of the revolutionary popular court, be tried and, if found guilty, be liable to the penalty of imprisonment as laid down in the Decree of 21 March 1921 on restriction of liberty <sup>(33)</sup>.

*Return of Amnestied Persons to Russia*

On the occasion of the fourth anniversary of the 'Great October Revolution' the officers of the All-Russian Central Executive Committee at Moscow decided, as on 3 November 1921, to offer an amnesty and permission to return home to workers or peasants who had taken part in military attempts against the Soviet Government and who now are living a miserable existence in foreign countries. In virtue of this amnesty the consular department of the Representative of the Russian Soviet Republic in Germany has issued an announcement, asking such persons to come forward and stating that, if they come within the terms of the amnesty, a temporary pass will be issued and arrangements be made to send them to a collecting camp with a view

<sup>(30)</sup> *Köztelek*, 8 Apr. 1922.

<sup>(31)</sup> The first Order, which was dated 23 July 1921, was published in the *Budapesti Közlöny* of 6 Aug. 1921.

<sup>(32)</sup> *Pester Lloyd*, 13 Apr. 1922.

<sup>(33)</sup> *Bollettino della Emigrazione*, Jan. 1922.

to sending them on to Russia. They will be provided with food and material comforts on the basis of the regulations which were in force for prisoners of war returning to Russia <sup>(34)</sup>.

### *Immigration into the United States*

The press publishes information on the effects of last year's Immigration Act. The Chairman of the Committee on Immigration and Naturalisation of the House of Representatives, Mr. Johnson, has stated that the total of 355,825 immigrants allowed each year will not be reached at the end of the current fiscal year. Mr. Johnson added that immigrants were now arriving weekly at the rate of 1,500, as compared with more than 15,000 the previous year. It is noticeable that the number of adult men among the new arrivals is small : 85 per cent. are near relatives of persons already living in the United States, and the great majority of them are women and children.

Among the countries which have been most affected by this law are to be mentioned : Palestine, Syria, Turkey, Greece, Spain, Africa, and Australia. The quotas which have been allowed to these countries are so small that it has not been possible to avoid contraventions of the Act. Thus, the quota of immigrants admissible from Palestine only amounted to 56. Yet in reality 199 have already been admitted from that country. From June 1921 to March 1922 the total number of provisional admissions ("on bond") amounted to 1,700, the majority of which were accorded to immigrants who had come over in excess of the quota of their country.

Germany and Russia have sent the least proportion of their quotas of immigrants. On February Germany could still have sent 56,034 immigrants, and Russia 18,000, but it is expected that there will be a large increase in the immigration from these two countries. In regard to Russia in particular it is announced that the Lithuanian <sup>(35)</sup> and Lettish Governments have given the Central Jewish Immigration Committee permission to accommodate in their territory at its expense, and for a duration of not more than three months, immigrants coming from Soviet Russia and on their way to other countries. Further, the Soviet Government intends to allow wives and children of citizens or nationals of the United States to leave Russia in order to go into that country <sup>(36)</sup>. At the same time it is reported that a certain number of immigrants going to the United States found themselves held up at Kovno, the American Consul of that town being obliged to refuse his visa to immigrants who were unable to present passports legalised by the Soviet authorities <sup>(37)</sup>.

Mr. Johnson also submitted to the House of Representatives a Bill according to which all foreigners who came into the United States before 1 March 1922 in excess of the quotas fixed by the immigration law and who were temporarily admitted under bond will be authorised by the Secretary of Labour, if they satisfy the general conditions of admission, to remain in the United States.

The House of Representatives had passed a Bill proposing to extend the Three per Cent. Act, which would have expired in June of this year, for one year, while the Senate's proposal is to extend it for two years. To prevent aliens entering the United States after a brief residence in

<sup>(34)</sup> *Nachrichtenblatt des Reichswanderungsamts*, No. 7, 1 Apr. 1922.

<sup>(35)</sup> *International Labour Review*, Vol. V, No. 2, Feb. 1922, p. 315.

<sup>(36)</sup> *Immigrant*, 9 Mar. 1922.

<sup>(37)</sup> *Foreign Born*, Mar. 1922.

Mexico, Cuba, or Canada, the Senate Bill provides that foreigners must have lived five years in those countries before they are eligible for admission to the United States.

A further amendment imposes a fine of \$200 upon steamship companies bringing immigrants in excess of the quota, and requires the company to refund the amount of passage money paid by immigrants denied admission<sup>(38)</sup>. The House and Senate Bills will be brought into harmony by a conference committee.

A tendency is appearing in favour of a revision of the whole of the present legislation on immigration. While recognising the value of a limitation of immigration under present-day circumstances, certain circles consider that it would be desirable to perfect the method and change the principles on which a selection of immigrants is carried out. Various Bills have lately been presented to Congress dealing with the regulation of immigrant traffic. Senator Jones has presented to the Senate a Bill in virtue of which 50 per cent. of immigrants coming from maritime countries, and 100 per cent. of immigrants coming from inland countries, must travel on ships carrying the United States flag. The same Bill was introduced by Mr. Cable into the House of Representatives. The text also provides for the inspection and examination of emigrants in foreign ports. This Bill is in harmony with the policy of President Harding, as defined in his recent Message to Congress, of subsidising and supporting the mercantile marine.

Two other Bills are especially interesting, as they propose the creation of a special organisation to study and control immigration into the United States. One of these is Mr. King's Bill<sup>(39)</sup>, and the other is a Bill submitted to the House of Representatives by Mr. Vaile. Both Bills, besides setting up an Immigration Board, assign to consular officials of the United States the duty of examining intending emigrants before they embark. Both Bills, again, provide means of controlling the classes of workers admitted according to the requirements and employment situation of the United States. Mr. King's Bill would reduce the proportion of any particular nationality admissible each year from three to two per cent. as determined by the census of 1910. According to Mr. Vaile's Bill the total quota of immigrants admissible each year should not exceed 0.75 per cent. of the population of the United States, and that of immigrants of any particular nationality 0.20 per cent. of the said population.

### *Japanese Immigration into Brazil*

Hitherto the Brazilian Government has granted a subsidy to all Japanese emigrants arriving with their families; but, owing to the tendency of the emigrants to move or return to their native country shortly after their arrival, the Brazilian Government decided to discontinue the subsidy to Japanese emigrants from the beginning of the present fiscal year.

It is stated that the contracts of the State of São Paulo (Brazil) for the introduction of Japanese immigrants have expired, and have not been renewed, as the Treaty arranged with Italy ensures a sufficient supply of Italian labour. The Government of São Paulo explains the suspension of subsidised immigration by the fact that Brazil does not require Japanese workers for the coffee plantations, where the work

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<sup>(38)</sup> *Morning Post*, 18 Apr. 1922.

<sup>(39)</sup> *International Labour Review*, Vol. V, No. 5, May 1922, p. 815.

is of a kind for which they are unsuitable ; but that does not mean that Japanese immigration will not continue freely into the colonies of the Iguape.

### *Immigration into Bolivia*

A Decree of 27 October 1921 makes it obligatory for all persons wishing to enter the territory of the Bolivian Republic to present the following documents on request of the competent authorities : (1) a passport from the traveller's home authorities containing a description of the traveller's person and his finger prints ; (2) a certificate stating that the traveller is free of infectious disease ; this certificate must be signed by a doctor of the last town where the traveller stopped ; (3) a certificate signed by the police of the last place of residence of the traveller, stating that the traveller has not made himself liable to penalty for any criminal act within the last five years and has not been charged with any such act ; (4) a certificate from the same authority, stating that the traveller follows some respectable occupation. Bolivian consular officers are required to refuse visas, or renewal of visas, to all passports where the traveller is unable to produce these documents. In case of contravention they are temporarily relieved of their office, or, if the offence is repeated, recalled. Minors accompanying their parents, and not having separate passports, are exempted from these regulations, but even they must produce a medical certificate <sup>(40)</sup>.

### *Colonisation of Dutch Guiana*

By a Decree of 5 December 1921 the Government of Dutch Guiana appointed a Commission of sixteen members to investigate the means of increasing the population. This Commission is to take account of the fact that former immigrants from British India, now repatriated, have shown a desire to return to the colony as settlers, provided they are given a free passage, and numerous requests for information have been addressed to the Government as to the conditions under which it would encourage colonisation in Dutch Guiana. The Commission will investigate in particular what peoples and races would best satisfy the above requirements, what advantages and encouragement should be offered, and what preliminary measures should be taken with a view to providing settlers with homes. It would also have to calculate the cost of carrying out the suggested measures.

## WELFARE AND PROTECTION WORK

### *An Immigration Congress in the United States*

A congress on the various problems of immigration, convened under the auspices of the Young Women's Christian Association, was held from 14 January to 25 February 1922. The speakers, though not opposed to the restriction of immigration in principle, were unanimous in demanding improvements in present legislation. A number of cases were cited where the deportation of immigrants has caused serious harm and suffering, especially by separating the members of a family, some of whom happened to have been born in different countries or to have arrived after the total of the monthly quota allotted to their country had already been admitted.

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<sup>(40)</sup> *Bollettino della Emigrazione*, Jan. 1922.

Professor Elsworth Huntington advocated scientific selection of immigrants according to their various aptitudes and not according to their nationality. Dr. Isaac Hourwich discussed the economic side of the problem. In his view, during the period when immigration into the United States had fallen to a very low figure in consequence of the war, the wages of American workers were not raised in proportion to the increasing cost of living. In order to remedy the lack of labour, factories, having no immigrants to draw upon, had to appeal to agricultural workers and children. For these measures, injurious to the country as a whole and to the working class in particular, immigration cannot be held responsible at all. Restriction of immigration will not therefore satisfy the legitimate aspirations of American workers, all the more because American manufacturers will always be able to maintain their own works with foreign workmen abroad.

Mr. Ernest Greenwood pronounced himself in favour of an examination of immigrants abroad before their departure for the United States as being the sole means of avoiding the serious inconvenience entailed by deportation. He emphasised the useful part which the International Emigration Commission might play in this matter by facilitating the necessary negotiations with the governments of foreign countries. Mr. W. J. Peters drew the attention of the congress to the difficulties encountered by American consulates in the application of American immigration legislation, and to the advisability of appointing special vice-consuls who should be experts in immigration matters. At the present moment five such posts have been created. Dr. Adolfo Vinci, Councillor for Emigration at the Italian Embassy at Washington, declared himself definitely in favour of collaboration between the Italian and American Governments with a view to controlling Italian immigration to the United States. This collaboration would enable the United States to obtain its immigrants by a selection which would allow only desirable immigrants and such labourers as the country might require. Mr. Sidney L. Gulick expressed himself in favour of the Sterling Bill, which provides for the creation of a Federal Immigration Commission empowered to apply the immigration Acts and to admit or reject immigrants according to definite principles conditioned by various factors, especially by the economic and industrial situation of the United States <sup>(41)</sup>.

#### *Co-operation among Italian Emigration Societies <sup>(42)</sup>*

The General Confederation of Labour (*Confederazione Generale di Lavoro*), acting through its Confederal Office for Social Legislation (*Ufficio Confederale di Legislazione Sociale*), called a conference in Milan to deal with various questions of social reform on 26 and 27 March. The conference was attended by representatives of the federations and chambers of labour affiliated to the Confederation, of the various associations for social insurance, of emigration offices, and various societies or agencies concerned with the protection of labour; delegates were also present from the state insurance offices and from scientific societies, as well as a number of persons who were specially interested in the questions on the agenda.

A prolonged discussion took place on welfare work for emigrants. A special committee was appointed representing the different shades of

<sup>(41)</sup> *Foreign Born*, Mar. 1922.

<sup>(42)</sup> SOCIETÀ UMANITARIA : *Corrispondenza Settimanale*, 31 Mar. 1922.



opinion which had been expressed on the question ; this committee presented a suggestion which was in the nature of a compromise.

It is suggested that, with regard to the question of emigration, the Confederal Office for Social Legislation should be instructed to come to an agreement with the trade unions most interested in the problem and with the emigration agencies attached to "Umanitaria" with a view to considering what are the most suitable means for ensuring effective co-operation between the various agencies dealing with emigration and to formulating a common policy.

The suggestion was accepted, with the explanation offered by Mr. Magioni to the effect that the Executive Committee of the General Confederation of Labour would view it as a recommendation only, without considering themselves as bound by it in any way.

#### *Spanish Emigrants in the Argentine Republic*

The Council of the Federation of Spanish Associations is putting into operation a service for the reception of Spanish immigrants at Buenos Ayres. The intention is to offer the immigrant, from the moment he arrives, every assistance in making himself at home and settling down with the native population. With this object he will be given all information about the Argentine Republic which may be necessary to him, and his arrival will be notified to the Spanish societies.



# INDUSTRIAL HYGIENE

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## Notes on Industrial Hygiene

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### PROBLEMS OF FATIGUE

THE Second Annual Report of the Industrial Fatigue Research Board<sup>(1)</sup> gives an account of the work of the Board from 1 April 1920 to 30 September 1921. It is divided into two parts. The first consists of the report properly so called of the Board and describes the history of its administration. A summary analysis is given of the work done in investigation and research, of changes in the composition of the Board, and of new organisations set up. It is specially interesting to note the formation of four new committees for scientific work; these are the Committee on Industrial Health Statistics, the Committee on Physiology of Muscular Work, the Committee on Physiology of the Respiratory and Cardio-Vascular Systems, and the Committee on Psychology.

The most interesting part of the report, however, is undoubtedly the second part. This is a connected account of the results obtained in the study of industrial fatigue in the course of the investigations undertaken, detailed and critical accounts on these investigations having been published by the Board in previous special reports.

It is difficult to determine the value and scope of the methods which ought to be used in the investigation of industrial fatigue. The aggregate of conditions which influence individual output and individual fatigue in industrial life may be classified as (1) hours of work (both number of hours of work and their distribution), (2) physical conditions connected with the work (non-personal factors affecting fatigue and output), and (3) methods of working (personal factors affecting fatigue and output).

A preliminary statement must be made to the effect that factors actually outside labour conditions, such as food, lodging, transport, etc., are systematically excluded for the present, however important. They differ so enormously that, in view of the early stage at which research on industrial fatigue still is at the present time, investigation would seem to be necessarily limited to factors more constant in their nature, whose combined effect determines human output and industrial fatigue.

In the factory itself it is practically impossible to isolate a group of these factors satisfactorily; research has to be carried on although two or three groups of variables are present and acting simultaneously; for instance, the first variable might be hours of work, and the second the aggregate of other labour conditions. However, a complete study of the problem could be made, but would require, in theory, the following conditions: (1) sufficiently long periods over which hours of work were uniform; (2) separate estimates of the effects of other labour conditions; and (3) elimination of all factors not arising out of work and

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(1) MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD: *Second Annual Report to 30th September 1921 (including analysis of published work)*. 64 pp. London, H.M. Stationery Office. 1922

yet causing fatigue. It is a matter of some difficulty to get such conditions ; attempts have, however, been made on several occasions, while the temporary transformation of a variable set of factors into a set of constants has made it possible to study other sets of variables.

The study and the measurement of fatigue would be simplified if there were means in existence—direct tests of fatigue—for the purposes of such determination and of measurement. But up to the present it has been impossible to discover any test of this kind. In the opinion of the Board there are two reasons for this. In the first place, any test of fatigue, of whatever kind, depends on the measurement of a capacity rather than of an achievement. A careful distinction must, therefore, be made between a test for fatigue and a mere measure of the work done or energy expended. The second difficulty is that of completely eliminating volition, the exercise of which may entirely invalidate results obtained from the tests used. Recourse has, therefore, necessarily been had to such indirect tests of fatigue as are offered by variations in output, sickness and mortality statistics, labour turnover, lost time, and accident statistics ; these are the chief indirect tests which may be said to have a standardised technique.

Variation in output, both quality and quantity of output, is undoubtedly the most trustworthy test, provided that adequate allowance be made for certain disturbing factors, such as technical improvement or other changes, and for the fact that, strictly speaking, variations in output measure variations in performance and not in capacity to perform, and that, therefore, the results obtained are but experimental results which permit certain inferences to be carried over. It is a test which is easy to apply, but which is necessarily limited to processes which lend themselves to measurement of output in terms of units which are either constant or are capable of being rendered constant by calculation. Its sensitiveness depends on the nature of the work and, in particular, on the extent to which the human factor plays a part in production. This varies from 100 per cent. in manual processes to 0.0 per cent. in automatic processes.

Statistics of sickness incidence and of mortality in industry may serve as tests of fatigue, but the results are less directly applicable than those obtained from output. The information which they supply may be considered under three aspects : (1) unfavourable physiological conditions, if inherent in a given occupation, may obviously be reflected in a high rate of sickness and mortality for that occupation as compared with industry generally ; (2) in industries involving exceptionally arduous work or subject to exceptional conditions of employment, study of morbidity and mortality may very well denote whether excessive fatigue due to such work or conditions exists among the workers, and if so, in which particular occupations ; (3) a high rate of sickness or mortality may, in the absence of any other explanation, be an indication of the existence of fatigue.

Labour turnover and change in the working staff may, under certain circumstances, indicate the state of internal conditions in a factory ; by means of eliminating other factors it may be possible to isolate the fatigue factor and to define the part it plays. With the same proviso lost time may also serve as a test of fatigue ; but the first thing to do would be to give a precise definition of what lost time means, as the term is rather vague. On the other hand, there is no need to stress the obvious connection between industrial accident and industrial fatigue.

Other methods may sometimes be employed ; but the complexity of industrial processes makes it difficult to define a test for fatigue. A

patient study is, therefore, essential of those factors, such as fatigue and labour turnover, which condition work. It is now a well known fact that fatigue measured in terms of the diminution of output increases with the length of the working day. There are two possible methods, both offering certain advantages and certain disadvantages, for the study of the close connection between output and hours of labour. The first traces current variations in production extending over a given period of time; the second compares production for two different systems of employment by means of the mass data which may be collected.

Hourly variations in daily output permit of the tracing of typical work curves for different kinds of work, indicate the existence of fatigue at the end of a day's work, and allow of the investigation of the compensatory effects of interpolated rest pauses. Research on these lines has been carried on by the Board in relation to the charging of blast furnaces, silk weaving, metal polishing, and tinplate manufacture. Investigation into output variations hour by hour has shown the effect of rest pauses and spells of work, the results proving that the onset of fatigue is checked by the systematic introduction of rest pauses. Investigation into output variations day by day during the course of the week has made it possible to estimate whether the appearance of fatigue is normal or pathological, in other words, whether it disappears completely after a night's rest. Data have been collected from the silk-weaving industry, boot making, and the charging of blast furnaces.

Besides the study of variations in output hour by hour or day by day, attempts have been made to determine output variations over longer periods, such as the week, month, or even for a longer time. These are of value in tracing seasonal influences and in comparing the effect of different systems of employment in the same industry, when either the total number of hours worked, or their distribution, have been in some way changed. Thus work which involves exposure to high temperatures gives a maximum output in winter and a minimum output in summer, while that for the between seasons is intermediary.

Conditions of environment are also of importance, and the last part of the report is devoted to a discussion of them. The conditions of environment so far studied have been those of temperature, humidity, ventilation, and lighting; the problems of noise, vibration, and dust will certainly have to be studied later, as they too play an important part. The influence of each of these special factors has been calculated—the other factors being more or less constant—by a study of output. Output diminishes with a rise in temperature, a similar connection between the two factors appearing here as in the case of seasonal variations. Output also diminishes with increased humidity and with defective ventilation. It again diminishes with the disappearance of natural lighting; artificial lighting, even when powerful, gives an output which, in the estimation of certain investigators, is bound to fall short of that given by natural lighting by 10 per cent.

But if the arrangement of the hours of labour and the physical conditions affecting environment are the primary factors influencing output and fatigue, the personal factor in industry also plays a part, in other words, the worker's aptitude for the work on which he is employed. Here vocational guidance and selection show their full usefulness, for they touch directly on the efficiency of human motion and industrial fatigue. The Board has attacked the problem with a view to the prevention of fatigue, and several studies have been undertaken, e.g. among compositors in the printing trade, among groups of workers coming

from different geographical districts, and among girls in the confectionery trade.

The natural complement of vocational guidance and selection—which results in placing the worker in the work for which he is fitted—is time and motion study. The purpose of time and motion study is to provide standard methods of training for beginners. Other more special questions, such as machinery and plant designing, clothing, and seats, and, again, more general questions, such as the part played by human and by technical and mechanical factors in efficiency and their interrelation, have also engaged the attention of the Committee. Little by little, as data accumulate from the results of research, more exact ideas will be established as to the nature, conditions, and effects of industrial fatigue. We give below an analysis of three special reports published by the Research Board, which are important additions to our knowledge of the subject.

The introduction of machinery into industry has tended to conceal the influence of the human factor on industrial output; it is only in comparatively recent years that a systematic study based on modern methods of scientific research has been undertaken on this question. Information is required more especially on the topic of vocational guidance and selection. Experience has accumulated which proves that work is done with greater ease and less fatigue when the worker and the work are correlated. It is on these lines that the scientific management of industry should attempt to develop at the present time.

In the first, and by far the most important, of the three studies included in Report No. 16 of the Industrial Fatigue Research Board of the British Medical Research Council<sup>(2)</sup> Mr. B. Muscio has attempted to determine what psycho-physiological qualities are necessary in hand compositors in the printing room. Extremely ingenious tests were prepared for measuring the different qualities required, the two primary being apparently good eyesight and physical strength somewhat above the average (for the lifting of the formes). In addition, there is also a call for great dexterity of the right hand and the right arm, a capacity for very rapid visual observation, a fairly high degree of immediate memory, and a moderate degree of general intelligence. The value of the tests applied were confirmed by means of a comparison between the theoretical standard attributed to individual workers by their means and the skill and standing of the same workers in the practical work of their trade as vouched for by their foremen.

In the second study, which was also undertaken by Mr. Muscio with the assistance of Mr. Eyre, the two authors set themselves to investigate the basic characteristics as regards height, weight, and muscular strength of two groups of young persons, one from Essex and the other from Manchester. This study was chiefly a concise criticism of the Martin Strength Test, which has a considerable reputation in the United States, and attempted to prove that weight or grip (as measured by the Smedley dynamometer) is both a practical and utilisable measure of physical strength. The authors believe that, if industrial operations and movements were classified according to the physical effort required for them, a simple test like that of the measurement of grip would

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(2) MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD: *Three Studies in Vocational Selection*, by B. MUSCIO, B. EYRE, and E. FARMER. Report No. 16 (General Series No 6). 86 pp. London, H. M. Stationery Office. 1922. 1s. 6d.

permit of the examination of persons offering themselves for employment and of their rapid grouping into different classes corresponding to the different occupations for which they are physically suitable.

The third study undertaken by Mr. Farmer in a sweet factory applies the principles already analysed to certain definite industrial operations. Mr. Farmer made systematic measurements of the hands of the workers. After having eliminated those of his measurements which did not apply directly to the operations under investigation (dipping and packing of sweets), he was able to distinguish two types of workers, those with long-spanned hands and those with short-spanned hands. The author discusses the results obtained and comes to the conclusion that physical type plays a real, even if a very small, part in proficiency in work. He draws attention to the fact, however, that other factors exist which are very powerful, namely, psychological factors; these are so effective that in virtue of them a worker can profitably surmount her original physical inferiority. Still, physical factors rank first and their effects precede those of psychological factors; only after having made a study of physical factors could the more difficult subject of psychological factors be attacked.

In his concluding remarks the author emphasises the need for scientific method in vocational selection.

In another study, the seventeenth published by the Board<sup>(3)</sup>, Mr. P. M. Elton discusses differences in individual output as observed among women silk weavers, a trade in which output may fairly be said to depend first and foremost upon the running of the machines. For the same group of workers output varies according to the fabric woven, and variations in output, of from 43 to 90 per cent., according to the worker, were observed in working the same raw material. The best weavers, who at the same time are apparently the least busy, are those who either by instinct or by training adopt economic methods permitting them to concentrate their whole energy on their output without dispersing it on work of secondary importance. The less good weavers, although apparently more busy, perform unnecessary work either owing to want of training or to bad training. The author holds that the observations he has made justify the conclusion that a good weaver should have (a) good sight, (b) power of observation, (c) great manual dexterity, (d) a delicate and trained sense of touch, (e) powers of physical resistance sufficient to allow of her maintaining a standing position for a long time without fatigue.

These conclusions are an interesting contribution to the study of vocational guidance and to output.

The preface of the report on *Motion Study in Metal Polishing*<sup>(4)</sup> points out that the ease with which a given task can be performed, which obviously has a direct bearing on industrial efficiency and fatigue, is affected: (a) by the development of the latent capacity of the workers; and (b) by the proper adjustment of extraneous conditions such as

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<sup>(3)</sup> MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD: *An Analysis of the Individual Differences in Output of Silk Weavers*. Report No. 17 (Textile Series No. 4). By P. M. ELTON. London, H. M. Stationery Office. 1922. 1s. 6d.

<sup>(4)</sup> MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD: *Motion Study in Metal Polishing*; Report No. 15 (Metal Series No. 5), by E. FARMER, assisted by R. S. BROOKE. 65 pp. London, H. M. Stationery Office. 1921. 2s. 0d.

hours, the length of spell, and conditions of environment, e.g. temperature, lighting, ventilation, noise.

The present report of an intensive study of certain processes in metal polishing covers both these groups of factors to a certain extent. The investigation was limited to a small number of processes involved in polishing spoons and forks, but the results can, with small modifications, be applied to any other trade involving the grinding or polishing of metal. The basic principle of all the work observed was the application of the articles to be polished or finished to a revolving wheel. This wheel might be composed, as in filing, of compressed emery, with a view to removing the fringe of metal left on the spoons and forks after stamping; or, as in roughing, of wood covered with a leather tyre on which oily sand is dropped, in order to smooth the surfaces and edges after filing; or, as in dollying, of discs of calico sewn together and dressed with a mixture of tallow and rouge, for polishing. Thus, in spite of the use of machinery, the human factor in these processes is still the most important.

After carefully observing selected workers, the investigators made a number of experiments with a view to the reduction of fatigue and "unproductive time" and the increase of output. Improvement of external conditions was effected by the provision of seats, footstools, arm-rests, etc. in order to improve the worker's posture. It was found that the introduction of regular rest pauses decreased the total amount of "unproductive time" in the working day and reduced fatigue. Team work was found to increase output in filing, but not in dollying or roughing; in fact, it was found to be an actual improvement to put roughing workers on two processes (glazing and roughing) rather than to divide a single process among the team. A preliminary experiment was made in running the buffing wheels at different speeds, but this line of investigation has not yet been followed out. Motion study, strictly so-called, of polishing workers showed that systematisation of movement, a reduction in the number of strokes made per article polished, and in the energy expended thereon led to a more rhythmic use of the worker's strength, thereby increasing individual output and reducing the incidence of fatigue. The training of unskilled workers on the basis of the results of the investigation was found in a few weeks to produce more efficient work than several months of more or less haphazard practice, which was the only training previously given in the industry.

The conclusions of the report embody more or less definite recommendations for the future. It is stated that definite training as outlined in the report should be introduced throughout the industry for newly engaged workers. This will effect economy by shortening the learning period and produce more efficient workers. The provision of seats for all workers is emphatically recommended on the grounds both of the worker's health and strength, and of the increase of production. The investigators point out that further research is needed into the relations between vibration and fatigue, and the importance of rhythm and rest pauses.

Among technical questions in which research is required are those of an abrasive which will be cleaner and more efficient than sand and finer than an emery wheel, and of the best size, breadth, and speed for buffing wheels.

The extension of detailed investigations of this type, limited as they must be to a small number of processes or operations, cannot fail to be of value in the general study of industrial fatigue and efficiency.

LESIONS DUE TO ELECTRICITY <sup>(5)</sup>

The danger of electric currents depends not merely on their tension, but also on some auxiliary factors. This point had already been proved by Jaeger. The human body is a good conductor of electricity, owing to its fluid and salt content. The skin, however, is a good isolator, though its resistance varies with its thickness and dryness. A man whose skin is damp forms a much better conductor than a man whose skin is dry, and this theory has been borne out by the observation that the number of accidents varies directly with meteorological conditions. Nearly twice as many accidents occur during the hot months of the year as during the cold, and, excluding those due to lightning, the explanation is apparently to be found in the increased formation of perspiration during the summer months.

It has been an accepted dictum that currents of 100 to 150 volts are harmless and that danger only begins at 200 volts. This is incorrect; cases of death from currents of 50 volts, when acting under conditions of dampness are known. At a session of the Paris Academy of Medicine, held on 7 February, it was pointed out that currents of low tension (200 volts or less) might cause cardiac arrest with fibrillary contractions. Two cases were quoted in which the victims while in a bath touched, in one case an electric radiator with a faulty insulation, in the other a metal bell-pull into which there was a leakage of current. In a third case a workman was electrocuted by a current of 135 volts from a hand-lamp while working in a boiler. In Switzerland, during 1919, six deaths occurred from contact with ordinary hand-lamps, and during the war period eleven fatal cases were reported in the German literature from the therapeutic application of a sinusoidal alternating current of 50 volts and under.

Besides the strength, frequency, and nature of the current, and the resistance opposed to it, the danger of any particular current is influenced by the following factors: (a) the site of entrance into the body; (b) the duration of contact, (c) the size of the area under contact, (d) the physical condition of the individual (status lymphaticus increases the susceptibility), and (e) the psychic component. Expectation of a current diminishes its effect, while surprise increases it. An example of this factor is afforded by an engine driver, who made a habit of catching hold of a 500-volt clamp with both hands, and letting go again, as a bet for a glass of beer. He repeated this game as often as the beer was forthcoming, until one day he accidentally came into contact with the clamp, under the same conditions, and collapsed dead on the floor.

The clinical aspects of injuries due to electricity vary greatly in their immediate symptoms, in their course, and in their ultimate effects. Immediate effects are general, local, and distant. The most important of the general effects is 'electric shock', accompanied by a longer or shorter period of unconsciousness simulating concussion and often followed by a maniacal stage of cerebral irritation, a state which may occur even though the current did not pass through the central nervous system and which is probably reflex in origin.

The local effect consist chiefly in burns at the sites of entrance and exit of the current. The lesions are characterised by anaemia, dryness, and insensitiveness, due to massive coagulation necrosis. Subcutaneous emphysema has often been noted, but the cause of its production is not clear. Shedding of the superficial layers of the skin is common, but is not comparable with that produced by ordinary burns. The skin comes off as a

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<sup>(5)</sup> *Electrical Injuries* (illustr.). The *Lancet*, Vol. CCH, No. 5142, Mar. 18, 1922. London.



complete layer, with the hair attached to it intact, and may be found attached to the conductor which produced the shock, or hanging to the clothes covering the part. This phenomenon is pathognomonic of electrical injuries, and is therefore of the greatest medico-legal importance.

There is frequent oedema of the part, which, however, is not associated with inflammatory reaction, but is probably the result of changes in the walls of the vessels, the intima and elastic tissue being the most affected. This is the explanation of the necrosis of the whole extremity which sometimes occurs, the blood-supply being cut off at the time of injury or else some weeks after. Another lesion which occurs are small burns at the points of flexion of each limb through which the current has passed and which was in flexion at the time.

Jaeger has described this under the name of '*Etappenläsion*'. Dislocation also occurs in some cases and is due to strong tonic muscle contractions. As in ordinary burns, the internal organs, heart, and kidneys may suffer owing to toxæmia.

Among the late effects extending necrosis plays an important part, the primary necrosis extending in area and depth and not infrequently attacking the underlying vessels. . . . Secondary hæmorrhage is of frequent occurrence. . . . Nervous disturbances are common; they were previously thought to be entirely functional in origin, but Jellinek has demonstrated the presence of cell degeneration in the central nervous system. This explains the development of symptoms of tabes dorsalis, hæmatomyelia, lateral sclerosis, multiple sclerosis, and bulbar paralysis, any of which may become apparent weeks or months after the accident.

The same question was discussed at the meeting of the Royal Society of Medicine in London on 17 March 1922<sup>(6)</sup>. Dr. Legge, Chief Medical Inspector of Factories, stressed the difficulties encountered in the attempt to formulate regulations for first-aid in electrical injuries. Mr. Scott Ram warned the medical profession against the use of electric apparatus taking current from the public main; any short circuit would expose the patient to the full current from the main, which was usually of high voltage and likely to be fatal. He also suggested, as part of the immediate treatment of accidents, the use of some mechanical or other counter-stimulus. The president summed up the conclusions arrived at as (1) that artificial respiration should be tried for an hour or more; (2) that vibration of the heart (massage, etc.) should be employed; (3) that stimulatory drugs should be injected into the heart or into a vein.

#### EFFICIENCY OF AIR-CONDITIONING SYSTEMS

A note on the efficiency of various systems of air-conditioning in a munition factory in the United States has recently been published by Messrs. Winslow and Greenburg<sup>(7)</sup>. They arrived at the following conclusions.

(1) The commonest evil in the field of air-conditioning is the slight, but highly objectionable, overheating which obtains in the ordinary window-ventilated factory workrooms where there is no marked overcrowding and no special process tending to overheat or vitiate the air. This evil can generally be controlled by routine observation of

(6) *The Lancet*, Vol. CCII, No. 5143, 25 Mar. 1922, p. 585. London.

(7) WINSLOW, C.-E. A. and GREENBURG, L.: *Notes on the Efficiency of Various Systems of Air-Conditioning in a Munition Factory*. United States Public Health Reports, No. 6, 10 Feb. 1922.

thermometers, the application of common sense to the regulation of artificial heat sources, and the use of windows before and during the shift.

(2) Heat hazards of high degree of intensity can be adequately controlled during cool weather by properly designed and operated systems of fan ventilation.

(3) In summer time, while the hazard incident to processes involving the production of excessive heat can and should be mitigated to some extent by a system of ventilation which produces vigorous air movement, it cannot be fully controlled except by special systems of air cooling which would involve a prohibitive expense and must, in general, be accepted as an inevitable incident of certain industrial employments. Where this is the case, the effects of the high temperature should be minimised by short spells of work alternating with rest periods.

#### CHRONIC INDUSTRIAL POISONING FROM BENZOL

In addition to cases of serious or slight poisoning of an acute character arising out of the inhalation of benzene (benzol) fumes, among workers, other cases are known which develop slowly; these are characterised by grave progressive anaemia with subacute symptoms, which may be fatal, sometimes by a slower development which admits of being cured. This form of poisoning may be recognised by the smaller number of red pustules, by their not becoming purulent, and above all by very pronounced leucopenia affecting the polynuclear elements. Serious haemorrhage is a frequent symptom, as are haemoptysis, gingival haemorrhage, purpura, etc.

Oettinger <sup>(8)</sup> reports two cases, which were ultimately cured but after a very long interval, and where the cure had not been completed even four months after the attack. He draws attention to a fact important from the point of view of diagnosis, namely, that these two cases showed large bucco-pharyngeal ulcerations, in the one case on the roof of the mouth, and in the other on the tonsil; he attributes this to the action of benzene on the lymphoid tissues. These lesions might be an aid to diagnosis, which, in the absence of data, is sometimes difficult.

#### MATERNITY AND INDUSTRIALISM

"Motherhood is a normal physiological function and should be the natural right of every woman, but civilisation makes it in many cases abnormal." This sentence summarises the article written by Dr. Louise McLroy <sup>(9)</sup>. The author argues that dismissal of women on marriage is undoubtedly an injustice, and it is regrettable that the state services should, in Great Britain, be the leaders in this policy. If marriage puts an end to women's work, it becomes the destroyer of all chances of a professional or industrial career and relegates women to the ranks of the casual worker. Nor do the results of such dismissals fall on the woman only; the state itself suffers. For, if the experienced woman worker, well trained in her work, is forced to leave it on marriage, the state will be compelled to put up with inexperienced beginners, a state of affairs of which the disadvantages are obvious.

<sup>(8)</sup> OETTINGER: *Intoxication chronique professionnelle par le benzène*. Meeting of the Soc. de Méd. Légale on 13 Mar. 1922. See *La Presse Médicale*, 29 Mar. 1922, No. 25, p. 273.

<sup>(9)</sup> LOUISE MCLROY: *The Problem of the Working Mother*. The Nation's Health, Vol. IV, No. 3, Mar. 1922, pp. 132-5. Chicago.

The solution of the problem is even more difficult when it is a question of pregnancy. The present tendency to look on maternity as a crime, punishable by dismissal, as is drunkenness in a man, must be abandoned. The war has also complicated the question of maternity, which is of great importance to the working classes. The problem should be studied from two points of view :

- (1) the effects of maternity on woman's work ;
- (2) the effects of work on the health of the mother and her child.

It is true that pregnancy temporarily diminishes the market value of the woman's work. But if it is to be avoided, the consequences would be still more serious, such as (1) celibacy of some of the best women workers, intellectual or other, (2) free love, or (3) the induction of criminal abortion.

Working women sometimes try to hide their pregnancy in order not to be dismissed ; they therefore frequently suffer from ailments which have bad results upon their future health and that of their children. It would be desirable that pregnant women should remain in their usual surroundings as long as possible, provided that these surroundings have no ill effects on their children.

The state, by the provision of a Ministry of Health with its care of the expectant mother, has at last shown that it recognises the potential value of the future mother and her child. All practical measures are now being taken to protect the mother during pregnancy, child-birth, and the effects of child-birth, and to reduce infant mortality. Progress has been made not only in the care given to the mother's health, but also in the material assistance which is now granted to her. In large industrial centres special clinics have been established where the mother can obtain the necessary care during pregnancy, labour, and convalescence. Some obstetricians have advocated the notification of pregnancy with a view to securing medical supervision for the expectant mother.

The article concludes : It is obvious that a woman during pregnancy should abstain from certain work harmful to her, such as the lifting of heavy weights ; but light work, especially where sitting is possible, can be continued to the end of pregnancy. Leave should be given for pregnancy just as it is given for confinement, if, in the opinion of the doctor, it is advisable. Special rooms should be arranged in the factory for the use of mothers nursing their children. Finally, there should be a maternity insurance fund.

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# VOCATIONAL GUIDANCE

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## Notes on Vocational Guidance\*

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### THE WORK OF THE NATIONAL INSTITUTE OF INDUSTRIAL PSYCHOLOGY OF GREAT BRITAIN

THE National Institute of Industrial Psychology<sup>(1)</sup> of Great Britain held its first annual general meeting on 10 March 1922. The following information is taken from the report submitted to this meeting.

During the year the Institute undertook private investigations for various firms. The subjects covered included installation and arrangement of machinery; size of material used in relation to ease of handling; weight and shape of special tools; introduction of rest pauses; proper sitting accommodation to prevent unnecessary fatigue; best arrangement of materials so as to reduce the number of necessary movements to a minimum, make the movements of both hands easy and rhythmic, and lessen fatigue and mental effort; improvement in ventilation of workshops; protection of workers against excessive heat; organisation of selection tests in order to reduce the number of incapable and discontented workers and prevent labour unrest; training of new workers. The systematic records kept during several of these investigations showed that the result of following the instructions given was an increase of output and a reduction of fatigue. In every case the workers seem to have highly appreciated the work of the Institute. Details of these investigations will be published in the *Journal* of the Institute. Subscriptions amounting to £1,921 have been received by the Institute from manufacturers in support of its research.

The first number of the *Journal*<sup>(2)</sup> gives an account of the early history of the Institute. The first idea was due to an engineer, Mr. H. J. Welch, who in 1918 approached Dr. C.S. Myers, Director of the Cambridge Psychological Laboratory, with a view to initiating some joint scheme for research in industrial psychology. The Institute has now been incorporated and the progress of its work is most encouraging.

The work of the Institute may be ranged under six headings:

(1) The study of the requirements of various industrial and commercial occupations, and the elaboration and application of suitable tests so as to secure (a), in co-operation with industry and commerce, more efficient and scientific selection of workers, and (b) in co-operation with the schools, more reliable guidance for children when choosing their life's work.

(2) The investigation of the best methods for applying human energy in different factories, offices, etc., especially in regard to (a) the elimina-

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\* These Notes have been prepared from material supplied by the Jean-Jacques Rousseau Institute at Geneva.

(1) The address of the Institute is 329 High Holborn, London. W. C. 1.

(2) The *Journal of the National Institute of Industrial Psychology*, Vol. I, No. 1, Jan. 1922, pp. 2-5.

tion of unnecessary movements, (b) the most advantageous distribution of rest periods, (c) the reduction of monotony and increase of interest.

(3) The determination and realisation of the conditions which tend (a) to the maximal health, comfort, and well-being of the worker, and (b) to the best relations between management and labour, e.g. in regard to lighting, ventilation, methods of payment, labour representation, etc.

(4) The study of the factors influencing the sale of products, e.g. advertisement and designing.

(5) The provision (a) of lectures to employers and to workers, and (b) of training courses for managers, foremen, welfare workers, and investigators.

(6) The encouragement and co-ordination of research work on industrial psychology and physiology throughout Great Britain, and the publication of the facts established by such research in a form which will indicate their practical value.

#### THE BARCELONA INSTITUTE AND ITS BRANCHES

The May 1921 number of the *Annals* of the Barcelona Vocational Guidance Institute<sup>(3)</sup> announced that the Institute intends to open branches in the smaller towns of Catalonia. The following particulars as to how the plan is being carried out are taken from the *Psychotechnische Rundschau* for April 1922.

Several requests having been received from persons of standing in industry and commerce for the formation of vocational guidance centres run by the Institute, the question has been under consideration by the Institute, and the following principles have been adopted. The request for such a centre must be made by the municipal authorities of the town, by an employers' or workers' association, or by a public utility society. The local branches will deal with vocational guidance either of individuals or of groups, from the standpoint of educational, social, and medical (including anthropological) qualifications. Tests will only be applied when thought necessary by the Institute. All information in the possession of the central office will be available for the use of the local branches; the latter in return will send in detailed statistical information on the advice they have been asked for and on anything else of interest connected with vocational guidance. They will contribute at least 250 pesetas per annum to the expenses of the central office. Each branch will consist of the following sections: (1) organisation and consultations; (2) medicine and anthropometry; (3) comparative statistics. The Barcelona Institute has control of the administration, and each town has a council made up of representatives of the municipal authorities, employers, workers, and peasants.

The work of the Institute has aroused considerable interest in professional circles. The laboratory equipment has interested students and made them wish to take part in the research which is in progress. Half-yearly courses have been organised. The object of each course is to train two assistants for each of the psychological and anthropometrical laboratories. Candidates for these courses must be within certain age limits, hold a university degree, and know Catalanian. Students have to submit a report on their practical work in the laboratory during the period of training. The third of these courses began in January 1922.

(3) *Institut d'Orientació Professional*, Sant Honorat 5.

## VOCATIONAL GUIDANCE OFFICES IN CZECHOSLOVAKIA

In Czechoslovakia the idea of organised vocational guidance offices dates back to the Revolution of 28 October 1918. The working out in practice of this idea is rather more recent, as the Section in charge of the work (\*) only came into existence in June 1920. At the outset it aimed solely at promoting the welfare of young persons, but its scope is now very much wider, and it has been incorporated as an autonomous institution in President Masaryk's Labour Academy (†). The Council of Management of the Central Bureau includes delegates of four Ministries (Social Assistance, Education, Commerce and Industry, Agriculture) and representatives of various committees, industrial councils, and chambers of commerce.

The first step taken by the Central Bureau was to organise various propaganda conferences, with the double aim of interesting the public and enlisting helpers, particularly among school doctors and teachers. The programme of these conferences was somewhat as follows : objects of vocational guidance, methods and results of scientific research on natural capacity, organisation of vocational guidance, health conditions of industrial occupations, survey of publications, psychology and psychological pathology of adolescence, economic prospects in industrial occupations, methods of experimental psychology. Associations of workers and manufacturers were then called in to help. Enquiry forms were sent out and a start was made toward collecting data about working conditions and the requirements of the various occupations. The information so obtained was afterwards supplemented by personal investigations in the workshops. More than sixty visits of this kind were paid, and about forty occupations were analysed on a uniform plan.

The Prague Vocational Guidance Office was opened on 1 May 1921. Up to the present its work has been limited to consultations on industrial occupations and crafts, no attempt having as yet been made to deal with careers which require a superior education. When a child comes to the Office, accompanied by his parents, his name is entered on the register and a card giving particulars about him (prepared beforehand by the school authorities for all pupils of school-leaving age) is taken from the card catalogue. The adviser (a woman) talks over the chosen occupation with the child and his parents, gets all necessary information about the family, its social position, the child's success at school—a report of the last three classes attended must be produced—his character and his tastes, and enters these details on a special form. The child is then given a card entitling him to a free medical examination and to a psychological test at the Labour Academy. When these are finished, the child goes back to the Office, and the adviser, who knows the results of the tests, applies a process of elimination based on these results to decide whether she approves of the child's choice, or whether she should try to make him change his mind and suggest something else to him.

Of the 5,000 pupils who left the Prague schools in 1921 only 500 consulted the Vocational Guidance Office between 1 May and 30 September. The smallness of this number is due to quite accidental reasons ; in any case it would have been very undesirable to swamp the Office with work at the start. All the cases dealt with by the Office were adolescents

(\*) *Obdor pro vybudovani poraden pro volbu povolani.*

(†) *Masarykova Akademie Prace.*

between 14 and 18 (90 per cent. boys and 10 per cent. girls). The favourite occupations for boys were those of an electrician, mechanic, motor-car repairer, fitter; and for girls, of a dressmaker, clerk, shop assistant. The unpopular occupations for boys included those of a baker, miller, chimney sweep, blacksmith, tinsmith; and for girls, domestic service. Defective education is the great obstacle to vocational guidance.

#### RECENT DEVELOPMENT OF VOCATIONAL GUIDANCE IN GERMANY

Vocational guidance in Germany is at an advanced stage of development. The Bavarian Decree of 18 December 1917 was followed by similar Circulars and Orders in other States, notably in Prussia, Württemberg, and Saxony. The Prussian Order of 18 March 1919 is remarkable in that four Ministries (Interior, Commerce and Industry, Agriculture, and Education) are jointly responsible for it. The country has been scientifically mapped out and covered by a well organised system of bureaux. Specially planned and carefully prepared periodicals are published for the guidance of the officers of these bureaux. The particulars given below are taken from a still unpublished study on vocational guidance in Germany (\*).

It is in Prussia that vocational guidance bureaux have most markedly developed into independent organisations. Under the 1919 Order every district (*Kreis*), whether town or country, must set up a vocational guidance office (*Berufsamt*), unless exempted by the supervising authority. Several districts may join together and set up a single joint office, but towns with a population of over 10,000 must have an independent one of their own. These offices open special bureaux for any part of the area they deal with where one is needed. If there is an employment exchange which is in regular use, the vocational guidance office is incorporated in it, but retains its independence of action. The office may also be attached to the child welfare services (*Jugendpflege*) or may remain completely independent. In small towns in East Prussia vocational guidance is sometimes left to the schools, but in most cases the first plan is adopted. There is a provincial office over the local offices; in Saxony and in Württemberg there is also a State Office (†), which acts as a supervising authority.

Since 1920 there has been in the Federal Ministry of Labour a Federal Employment Exchange Office (§), which acts as a central vocational guidance office; it publishes the *Reichs-Arbeitsblatt*. The State Offices issue several periodicals; for instance, the Brandenburg State Office issues a monthly Review, *Arbeit und Beruf* (Work and Vocation), and the *Berufskundliche Nachrichten* (Vocational News), which, according to the title page, are specially for the benefit of vocational guidance offices and advisers. The Saxe-Anhalt vocational guidance office at Magdeburg has published some papers which are intended to act as a basis for vocational guidance (*Berufskundliche Unterlagen für die Berufsberatung*), and which seem to have been compiled with the greatest care.

The following outline of the organisation of the Berlin office will give an idea of its scale and scope.

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(\*) The Institut J. J. Rousseau has received an advance copy of this study, which is by Dr. Alice Cziner of the Berlin Institute of Applied Psychology.

(†) *Landesamt für Arbeitsvermittlung*.

(§) *Reichsamt für Arbeitsvermittlung*.

**A. Guidance Section.**

- (a) Executive.
- (b) Classified occupations :
  - (i) Gardening, forestry, agriculture, fishing ;
  - (ii) Metal industry ;
  - (iii) Wood and stone industries ;
  - (iv) Clothing, leather, laundry, and textile industries ;
  - (v) Printing and paper industries ;
  - (vi) Food and drink and hotel industries ;
  - (vii) Commerce ;
  - (viii) Civil service ;
  - (ix) Careers requiring secondary school and university education ;
  - (x) Persons who are mentally or physically defective or unable to support themselves ;
  - (xi) Commerce (women's occupations) ;
  - (xii) Industry (women's occupations) ;
  - (xiii) Domestic and farm service, care of children and the sick ;
  - (xiv) Careers for women requiring secondary school and university education.

**B. External Services Section.**

- (a) Employment Service ;
- (b) Relations with the schools ;
- (c) Relations with technical schools.

**C. Literary and Statistical Section.**

- (a) Library and archives ;
- (b) Statistics.

**D. Medical and Psychological Section.**

- (a) Psychological tests ;
- (b) Medical tests.

**E. Administrative Department.**

- (a) Administration ;
- (b) Accountant's office ;
- (c) General Office.

**VOCATIONAL GUIDANCE AND SCHOOL CURRICULA IN GENEVA**

A Bill for compulsory apprenticeship was laid before the Grand Council of Geneva on 17 January 1917. A non-parliamentary Commission submitted a report in February 1921 which differed in several important points from the original scheme. The main lines of this report may be indicated. The Commission proposed the following amendment to one of the articles of the present Education Act :

The period of compulsory education, either general or technical, for all minors shall last until they can provide proof of their ability to practise a trade which will enable them to earn an honest living. After 30 June of the year during which they complete their fourteenth year, technical instruction may be given in the form of apprenticeship in private undertakings, such as workshops, shops, offices, etc.

The Commission considered the functions of technical schools and the relations between state and vocational organisations. It also discussed the primary school and a number of measures designed to promote vocational guidance for adolescents. Its proposals include, first,



subsidies to the Central Apprenticeship Office, similar institutions and the University Psychological Laboratory ; secondly, grants to official or private institutions which include the training of "apprenticeship advisers" among their activities ; and, lastly, a number of measures to be taken by the Department of Education to enable the primary school to make a more efficient contribution to vocational guidance than it has hitherto done. These measures include special training of teachers, modification of the last year's curriculum of the primary school so as to make more provision for vocational teaching, development of manual work in the primary school, adoption of a uniform school record, re-organisation and extension of medical examinations, revision of the health register, and establishment of systematic yearly statistics of what the children do on leaving school.

The Bill in question has not yet been discussed, but some of the proposals made by the Commission have already been put into practice, in several cases on the initiative of private organisations, such as the Institut J.-J. Rousseau, the *Société Académique*, etc. The new curriculum for primary schools, which was recently drawn up as the outcome of prolonged consultation with working teachers, and the recommendations of the Commission are both based on the same ideas. The curriculum aims at the "development of manual work in all branches of education". Probably for the first time, at any rate in Switzerland, vocational guidance is made a regular part of the school work in addition to general education, and has two hours a week (one for girls) assigned to it during the last year at the primary school. It is described as follows :

*Vocational Guidance.* A knowledge of various trades is necessary in order to instil and encourage interest and ambition in whatever occupation may be finally chosen. The schoolmaster should, therefore, take the children to see different workers actually at work. He will also make experiments in vocational guidance along modern lines, and will try to help his pupils in their choice of a future career. Wood and iron work for boys, practical domestic science for girls will develop the manual skill needed in all occupations. The school will encourage the pupils to give definite thought to the choice of their future work, and will keep in close touch with the apprenticeship advisers, whose work will be made much easier by what is done in the school.

The following will be included in the year's work : discussions ; work done by pupils or skilled workers ; descriptions of various occupations : physical and mental qualities needed, present and future economic value, method of entry, conditions of apprenticeship, dangers to health and other disadvantages ; visits to work-shops, factories, works, farms, etc. ; small experiments in vocational guidance in order to discover cases of hopeless unsuitability ; educational cinematograph films.

#### LITERATURE

A new book on vocational guidance which has been promised for a long time has just been published (\*). The author, Mr. F. Mauvezin, is Director of the Trades Chamber of the Gironde and South West, and has been writing about his quite original system since 1918 in the *Bulletin* of his Trades Chamber and in various pamphlets.

The young person who is trying to choose his future work may be

(\*) F. MAUVEZIN : *Rose des métiers. Traité d'orientation professionnelle. Qualités et aptitudes nécessaires à l'exercice de 250 métiers différents et défauts rédhibitoires*. 392 pp. Paris, Editions littéraires et politiques, 62, rue Tiquetonne, 1922.

compared to a ship enveloped in fog. Mr. Mauvezin continues the metaphor in describing his wish to provide a "Trades Compass" which may give the same kind of help to those who undertake vocational guidance of the young as the mariner's compass does to the fog-bound sailor.

One page of the book deals with each occupation. Allied occupations are grouped together as follows: paper and printing trades; industrial art; agriculture; food and drink and allied trades; wood; iron and metal; electricity; transport and shipping; building; commerce; various trades; trades for women.

A strictly alphabetical arrangement of all the occupations included would, no doubt, have considerable practical advantages over that adopted. Other plans might be suggested, but undoubtedly the ambition of all engaged in vocational guidance is now to find some way of systematising the information collected either by Mr. Mauvezin or by themselves, and marshalling it in a series of alternatives so that successive elimination will finally give a list of occupations "possible" for any specified case—the method, in fact, by which a botanical Flora finds the correct name of a plant by means of a series of questions.

For each occupation Mr. Mauvezin sets out in tabular form the various qualifications required for, or disqualifications prohibiting, employment. These may be physical and physiological, as height, strength, general, health, sight, hearing, lungs, etc.; colour blindness, vertigo, hernia, varicose veins, perspiration of the hands, bad chilblains; psychological, as alertness, coolness, attention, persistence, observation, memory, quickness of perception, manual skill, artistic sense, appearance, manners, orderliness, carefulness; or scholastic attainments, as writing, spelling, arithmetic, geometry, geometrical drawing, drawing of ornament, general knowledge. The most suitable age of apprenticeship is suggested, the length of the apprenticeship, according to whether it begins at 13 or at 15, and finally whether the trade is, or is not, open to women.

This part of the book is extremely interesting. It does not, of course, destroy the value of the previous monographs of Mr. Christiaens at Brussels, or Mr. Fontègne at Strasburg, but will rather encourage further work in the way of checking and completing the information already collected and adapting it to local circumstances. It will be of considerable interest, too, to compare it with the series of *Descriptions of Occupations* published by the United States Department of Labour, and with English monographs and German works of the same kind, among which we may specially note the second edition, dated 15 February 1921, of the *Berufskundliche Unterlagen für die Berufsberatung*, published by the *Landesberufsamt* of Saxe-Anhalt in Magdeburg, which gives information of 170 occupations for men, and 70 for women.

The *Trades Compass* properly speaking must not, however, be allowed to monopolise the reader's interest at the expense of the rest of the book. Mr. Mauvezin describes in the remaining ten chapters the experiments he has made in vocational guidance and his ambitions in this field. The importance of reading these chapters is increased by the fact that the method explained and recommended in them differs in several respects from that championed by Messrs. Christiaens, Fontègne<sup>(10)</sup>, Claparède at Geneva, and Mira at Barcelona, which is at

(10) Julien FONTÈGNE: *L'orientation professionnelle et la détermination des aptitudes*. Preface by F. Buisson. 263 pp. Paris and Neuchâtel, Delachaux and Niestlé. 1921. 8 francs. Cf. *International Labour Review*, Vol. II, No. 1, April 1921, p. 124.

present the best known, even if not perhaps as yet the most widely practised. The main difference is that the authors just named lay great stress on the psychological examination, in which the child is present and is observed and questioned directly, whereas Mr. Mauvezin attaches most importance to the enquiry form which is filled up by the child. A model enquiry form is given on pp. 38-43. It has rather more than a hundred questions which the child has to answer, and which amount to a thorough-going self-examination. In addition to questions about the child's capacities and tastes, there are others such as: Are you straightforward? Do you leave a job unfinished because you find it too hard or because you have lost interest in it? Can you keep a secret? It is questionable whether it is advisable to give such prominence to introspection in dealing with children of from 10 to 15 years of age, and doubts have been raised as to the sincerity of the answers as well as the accuracy of the information so obtained on health and physical qualities.

Mr. Mauvezin insists on the value of his enquiry form and defends it stoutly against Mr. Fontègne, who considers the personal interview with the candidate essential. He even opens a counter-offensive. "A twenty-minute talk with its hurried improvised question and answer cannot lead to the accurate conclusions which can be drawn on a carefully filled up enquiry form". He allows, however, some important corrections and additions to his method. Masters and parents of children under 15 (and ultimately of older children) are invited to read the enquiry form and add their comments on the answers given. "The present enquiry form", he says further, "is decidedly too long. It would be possible with very great gain to cut it down by more than half as soon as all schools adopt the pedagogical and physiological school record, and as soon as manual work becomes general in both primary and secondary schools." One further quotation may be given which is of importance as suggesting a possible reconciliation of the two methods. "It is beyond dispute that the enquiry form is much more satisfactory than the interview. In most cases, however, the interview will be the fitting complement of the enquiry form. This is the usual procedure of the Trades Chamber of the Gironde."

The reader may perhaps be reminded at this point that the enquiry form was the earliest method of vocational guidance. It was the only one used by Frank Parsons at the Boston Vocational Bureau, the ancestor of all vocational guidance bureaux, which was founded by Mrs. Q. A. Shaw in 1908. Mr. Parsons has published his enquiry forms accompanied by a detailed commentary<sup>(11)</sup>. The self-analysis recommended by him had a strongly marked moral trend, which is less evident at Bordeaux; the general principle, however, is the same. As a consequence of Mr. Mauvezin's book this method will certainly claim further attention from vocational guidance bureaux.

There is no need to dwell on Mr. Mauvezin's proposals for a school record. His specimen record, which is under two headings, pedagogical and medical, is interesting, but not very remarkable, and would need to be compared in detail with those used elsewhere. The really essential point is not to lose time in trying to evolve a perfect record, but to do something at once.

The chapter on "Manual Initiation and Pre-Apprenticeship" does, however, call for attention. Mr. Mauvezin applies the term "pre-apprenticeship" to a definite preparation of the child for its future

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(11) FRANK PARSONS: *Choosing a Vocation*. 165 pp. London, Gay and Hancock. 1909.

apprenticeship. He uses the phrase "practical work in manual initiation" for the manual training which is being increasingly included in the curricula of primary and secondary schools and which will, in consequence, benefit many children who will never become apprentices. The French Act of 28 March 1882 sees the necessity for giving children instruction in manual work and in the use of the tools of the principal trades as well as in the elements of drawing and modelling. The interpretation of the Act has gradually changed. "The original intention of the legislator was to give the children a general idea of all occupations. In the course of time, however, the primary school workshops have become more and more specialised and it is now admitted almost without question that the purpose of these workshops is the introduction of the child to the wood and iron trades alone, to the exclusion of all others. . . . And even this very brief list can be shortened still further by pointing out that the only trades taught in these workshops are those of fitter and—to some extent—smith for iron work, and of carpenter for wood. The children and even the parents have been given the entirely false impression that the wood and iron trades are the only ones of any importance since they are the only ones taught, and that none of the others are worth the very smallest attention."

Even if it had been strictly carried out, the 1882 Act could not have been altogether satisfactory. The child's professional training is not helped by showing him the tools of all the various trades in succession; there are far too many for this to be of any use. The idea of giving the child a smattering of a great many trades will not bear examination. The course recommended by Mr. Mauvezin is compulsory manual work for all children from 6 to 13 or 14 without exception. "All such work will aim at developing not only manual skill but also quickness of perception, judgment, initiative, and perseverance. Under no possible pretext must it be treated as a specialised training for some specified trade or group of trades". This is really the idea of educational manual work which lies behind the Swedish "Slojd" and the American methods studied by O. Buyse<sup>(12)</sup>. Everyone responsible for school curricula will find Mr. Mauvezin's list of suitable forms of practical work of considerable interest.



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(12) Omer Buyse: *Méthodes américaines d'enseignement*. 759 pp. Paris, Charleroi, Hunot et Pinat. Musée provincial. 2nd edition, 1909.

# GOVERNMENT REPORTS

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

THE industrial inspection service in Sweden is responsible under the Workers' Protection Act of 1912 <sup>(2)</sup> for the supervision of all employment except home work and nautical work. This considerable task is discharged by a centralised staff with the assistance of communal inspection authorities (the latter dealing with employment in industries not supervised by the factory or mine inspectors or sub-inspectors—in general, commercial and small industrial undertakings). In 1920 there were ten fully qualified industrial inspectors (one being a woman), thirteen assistants (including two women), eighteen sub-inspectors <sup>(3)</sup>, six inspectors of mines and six mining engineers, and ten extra women employees, together with thirteen temporary officials employed for varying periods during the year. Ten special inspectors co-operated with the industrial inspection staff—one for the manufacture of explosives, four for electrical installations, four for railways, and one for the living accommodation of persons employed in forestry and the timber trade (pp. 10-11).

The total number of workplaces on the registers of the inspection service in 1920 was 44,310, an increase of 3,103 over 1919. Of these workplaces 13,601 were allocated to the industrial inspectors and the explosives inspector, 29,989 to the sub-inspectors, and 720 to the inspectors of mines <sup>(4)</sup>. In addition to these, a certain number of workplaces came under inspection which were not registered on account of their brief duration or for other similar reasons (pp. 14-15). The 2,651 communal inspection authorities (usually the local boards of health) had under their supervision 27,110 workplaces employing 79,406 persons, 33,178 being engaged in commerce and 28,384 in handicrafts (p. 16).

During 1920 the industrial, mining, and explosives inspectors and assistants visited 3,989 establishments, employing 196,838 persons. The total number of actual visits to establishments or departments

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<sup>(1)</sup> SWEDEN : KUNGL. SOCIALSTYRELSEN : *Yrkesinspektionens verksamhet, år 1920* ; pp. 151 ; illus. Stockholm, K. L. Beckmans Boktryckeri. 1921.

<sup>(2)</sup> *Bulletin of the International Labour Office (Basle)*, Vol. VIII, 1913, p. 84 ; amendment, Vol. XI, 1916, p. 265 ; further amendments 26 April and 30 June 1918 (*Författningssamling 1918*, Nos. 223 and 397).

<sup>(3)</sup> The sub-inspectors supervise the enforcement of measures for the prevention of accidents in occupations not subject to inspection by the industrial or mine inspectors. The mine inspectors deal with mines and all industries directly connected with them, and the industrial inspectors with all industries and occupations (other than mining, agriculture, and commerce) in places where 10 or more workers are regularly employed, or power of 5 h. p. or more is used, or where 5 workers are employed and power of 3 h. p. or more is used.

<sup>(4)</sup> Under a Royal Proclamation of 5 December 1919 quarries were transferred from the industrial inspectors to the inspectors of mines. The work of the sub-inspectors was also increased by this Proclamation, all undertakings with less than 10 workers which used any mechanical power or vessels under pressure being removed from the control of the communal authorities and placed under the sole charge of the sub-inspectors.

was 5,880—an average of 518 per inspector, compared with 509 in 1919 (pp. 16-18). In the workplaces inspected 37 per cent. of the workers were employed in metalliferous mining and metal-working, and 17 per cent. in forestry, timber trades, and woodworking (pp. 130-4). Just over 11 per cent. of all the persons employed in these workplaces were young persons under 18, chiefly boys; about one-eighth of the adults were women. Young persons formed 17 per cent. of the total staff inspected in the textile and clothing trades, and 18 per cent. in the leather, skins, and rubber trades, both being groups in which women also were employed in large numbers (pp. 18-19).

The woman inspector and her assistants visited 946 workplaces, employing 39,258 persons, of whom 24,771 were women and girls; nearly four times as many places and twice as many workers were inspected as in 1916-1919 (p. 20). The woman inspector had also to devote a good deal of time to general social work, attending 52 conferences and giving nine lectures during the year (p. 21). A special investigation was made in the dressmaking and fur goods trades in Stockholm, particular attention being paid to hours of work. Visits were paid to 236 workplaces (215 in the dressmaking trade), where 545 women and 31 men were employed; only three of these places had 10 or more regular workers (p. 52). It was found that hours of work varied very much between different establishments. In general, the workers employed in dressmaking had an 8-hour day, and in 1920 there was very little overtime, on account of the general depression of trade. Shop assistants in these businesses, however, had, as a rule, a fairly long day, and unpaid apprentices and pupils were employed for long hours in many cases and were used to run errands on account of the shortage of cheap child labour (p. 53). In normal seasons, according to the woman inspector, a considerable amount of overtime is worked (p. 54). Hygienic conditions were reported to be passable, though lighting was at times unsatisfactory, mess-rooms and clothes-cupboards were rarely provided, and thorough ventilation during the day was often rendered impracticable by the fact that the workrooms were never empty (p. 56).

Special attention was also paid to the employment of women in loading and discharging vessels—work from which women under 21 are excluded by the Notification of 7 April 1916<sup>(5)</sup>. Comparatively few women were found to be employed in this way, and one communal inspector reported a general tendency to replace women by men as steamers replaced sailing-ships (pp. 21-2).

In addition to the visits made by the fully qualified inspectors, the sub-inspectors visited 10,487 workplaces, of which 4,399 were agricultural and 1,945 handicraft. In these workplaces (exclusive of the agricultural undertakings) 30,618 persons were employed (pp. 22, 143). The communal inspection authorities visited 26,505 workplaces, employing 84,458 workers—28,452 in handicrafts, 34,964 in commerce, and 5,209 in the building trades (pp. 23, 144). Of all the workplaces inspected, only 335 had workers' delegates (chosen under § 31 of the Workers' Protection Act to communicate to the inspector the workers' wishes in respect of sanitation and safety), though the woman inspector reports that textile workers have now begun to interest themselves in the appointment of delegates (pp. 24-5).

It was found necessary to send notices to 2,734 occupiers in respect

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<sup>(5)</sup> *Bulletin of the International Labour Office (Basle)*, Vol. XI, 1916, p. 263.

of defects; the explosives inspector was responsible for 63 of these notices and the mines inspection service for 33 (p. 25). Proceedings were taken in 236 cases (comprising 374 separate contraventions), as against 169 cases in 1919. Many of the contraventions related to the employment of young persons, and especially to failure to notify their employment or to see that they held the requisite certificates; 89 related to hours of work (pp. 41, 42, 147). The inspectors report that they had to devote much time to explaining the new legal provisions respecting hours of work<sup>(6)</sup>. The number of establishments inspected under the Hours of Work Act in 1920 was 4,167, and under the Bakeries Act 501. In wholesale bakeries (*spisbrödsfabrikerna*) it was found that the law was generally well observed; but the woman inspector expresses some anxiety lest the prohibition of night work for women should result in their displacement from the bakery trade (pp. 78-82). Some difficulties were met with in respect of hours in the anchovy industry, where the application of the 8-hour day Act was found to be impossible in the handling of fresh fish (p. 82). The inspectors also criticise conditions in the Stockholm restaurants and buffets, especially in the smaller establishments, where it is found difficult to adjust the hours of work of the limited staff to varying periods of pressure. Cleaning in factories has also been a problem, but the employment of special cleaners has been found the most satisfactory solution from the point of view of hours and hygiene (p. 83).

The accident returns are far above the pre-war figures, owing to a change in the basis on which the statistics are compiled<sup>(7)</sup>. For the year under consideration 37,195 accidents, including 348 fatalities, are reported in industry, and 2,110 accidents (12 fatal) in mining; in 1919 there were 44 fewer deaths in all, but 3,573 more accidents. The causes of accidents are not tabulated, though it is noted that agricultural machines produced 205 casualties (including 8 deaths) (p. 27). In various parts of the report the accidents in a few other occupations are noted. In the loading and unloading of vessels 982 persons were injured (8 fatally); over one-fourth of these accidents occurred where loading was done exclusively by hand (pp. 89-95). In connection with electrical installations 64 accidents (23 fatal) were notified (p. 99), and 2,171 accidents (33 fatal) on railways. The railway accidents are analysed in detail; a large number of them, and half the fatalities, occurred in shunting and coupling (pp. 102-5). The more notable accidents are described in detail (pp. 28-37), often with diagrams; most of them were due to explosions of steam boilers. These boilers, and all vessels under pressure, are registered with the industrial inspectors and sub-inspectors. In 1920 there were 20,756 so registered; the Steam Boiler Association (*Angpanneförening*) collaborates in the supervision of 7,550 of these; the inspectors in 1920 examined 7,806 boilers and containers not under the Association's care (p. 26). In 97 cases the provincial representative of the Crown was requested by the inspectors (under §§ 38 and 39 of the Workers' Protection Act) to

(6) Hours of Work Act, 17 October 1919 [INTERNATIONAL LABOUR OFFICE : *Legislative Series*, 1919 (Swe. 2)]; Bakeries Act, 17 October 1919 [INTERNATIONAL LABOUR OFFICE : *Legislative Series*, 1920 (Swe. 4)].

(7) Under the Act of 17 June 1916 (*Bulletin of the International Labour Office, Basle*, Vol. XI, 1916, p. 267) only accidents entailing death or incapacity for more than five weeks were notified. Under the Notification of 21 December 1917 (*Författningsamling 1917*, No. 911) all accidents entailing incapacity for work are notifiable.

prohibit the continuance of operations in certain undertakings, generally on account of unsafe boilers (pp. 41, 145).

In connection with safety and hygiene, many illustrated notes are inserted in the report, describing specially useful devices and model installations, e. g. ventilation and dust extraction systems, workers' lavatories, and a guard for calender rolls (pp. 56-78). An account is also given of observations made during official visits to Rotterdam and Antwerp in respect of the prevention of accidents to dock workers (pp. 86-8). Dock work in general is given a special place in the report, and it is noted that there has been a distinct improvement in the supervision and testing of lifting apparatus (pp. 83-5). Electrical installations are dealt with by their special inspector (pp. 97-9), and there is also a note on the progress of the use of electricity in agriculture (pp. 50-2). The conditions of employment on railways are also reported on separately (pp. 100-105).

Returns are made concerning the medical examination of young persons. In 1920 there were 44,965 persons under 18 recorded as being employed, 33,180 boys and 11,785 girls, one-fourth being in the metalliferous mining and metal-working trades and one-fifth in forestry and woodworking. The results of the examinations are tabulated in detail (pp. 95-7, 148-51); 2.4 per cent. of the young persons employed were found to have deformities or outward defects, 1.6 per cent. heart troubles, and 1.2 per cent. defects of vision. In more than half the cases of outward defect or heart weakness a change of work was recommended, while all employment was prohibited for 15 per cent. of the tuberculous cases (which were found to be 0.4 per cent. of the whole number).

The detailed statistical tables respecting employment in the various trades, inspectors' activities, and medical examinations of young persons are relegated to an appendix (pp. 129-51). The "story" for the year closes with the report of the inspector of forest workers' living accommodation (pp. 106-28), which contains many illustrations and plans of huts and movable dormitories. Large huts, to the number of 162, and accommodating about 1,700 men, were visited by the inspector during the year, while the local authorities inspected 96 huts occupied by 791 workers and 85 stables accommodating 238 horses. The method of including the construction of huts and stables in the forestry operations for which the workers are paid by contract is disapproved of by the inspector, who remarks that buildings erected in this way are apt to be less satisfactory than those for the construction of which the employer takes entire responsibility (p. 113). He states that he has made efforts during the year to popularise certain good types of hut, and has achieved some measure of success (p. 114).

#### INTERVENTION OF THE UNITED STATES FEDERAL GOVERNMENT IN RAILWAY LABOUR DISPUTES

**T**HE United States Department of Labour has recently published a bulletin<sup>(1)</sup> relating the history of Federal intervention in railway labour disputes from 1888 to 1921. The stages in the evolution of opinion and principle are marked by the passage of five

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<sup>(1)</sup> U. S. DEPARTMENT OF LABOUR, BUREAU OF LABOUR STATISTICS: *Use of Federal Power in Settlement of Railway Labour Disputes*, by C. O. FISCHER. 121 pp. Washington, Government Printing Office. March 1922.



Acts : the Act of 1888, the Erdman Act of 1898, the Newlands Act of 1913, the Adamson Act of 1916, and finally, the Transportation (or Esch-Cummins) Act of 1920. These Acts, with the exception of the Acts of 1888 and 1920, cover only train operatives who are organised in the four so-called Brotherhoods, which are the most important railway organisations. The Bulletin traces the change in opinion which has taken place during the period from 1888 to 1920. During the early period the Brotherhoods favoured arbitration and professed solicitude for the public interest. They were weak at that time and expected to gain by government intervention. The railways, on the other hand, feeling that their bargaining power was strong, wanted no government interference. Later on the two parties exchanged attitudes, because their relative position as bargainers was reversed.

The Act of 1888 provided for voluntary arbitration and empowered the President to appoint a Committee to investigate disputes. The Erdman Act and the Newlands Act were principally Acts for mediation and conciliation, while the Transportation Act is principally an arbitration Act. There has been a steady drift towards arbitration, culminating in the refusal of the Brotherhoods to make any use of the Newlands Act or of the mediation board created by it, and the passing of the Transportation Act of 1920. The author emphasises the importance of mediation and conciliation in the settlement of disputes under this body of legislation. He bases his argument principally on the fact that the large majority of disputes settled were disposed of through mediation ; but it has been pointed out<sup>(2)</sup> that the most important disagreements, gauged by the number of men and the mileage affected, were referred to arbitration for settlement.

In 1894, the sympathetic strike of the railwaymen in support of the Pullman employees necessitated Federal intervention to protect inter-State commerce and ensure the transport of mails, and gave rise to much discussion in Congress. Among the many Bills proposed, one, the Erdman Act, became law in 1898, and was approved by the Brotherhoods. The most important new feature was the appointment of two officials as mediators and conciliators. The arbitrators appointed by the railways and the men were intended to represent the economic interests respectively involved : under the Act of 1888 they had been required to be "wholly impartial and disinterested". In addition, there was to be a third and neutral arbitrator chosen by the first two. Arbitration, as in the previous Act, was to be voluntary ; but, once the parties had submitted their case to the arbitrators, they were bound to accept the award. A provision that an employer might not discriminate against a man on account of his belonging to a labour union was afterwards invalidated by the Supreme Court. Up till 1906 only one attempt was made to use the Erdman Act, and that was a failure ; from that time until 1913, however, it was applied with much success. By the machinery which it provided, 61 cases were settled in seven years, of which 45 were by mediation alone, and 16 ultimately by arbitration. There was never any repudiation of an award.

While the Erdman Act yielded good results, its insufficiency in several respects became noticeable as time went on. The single neutral arbitrator provided for was considered to have an excessive

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<sup>(2)</sup> U. S. DEPARTMENT OF LABOUR, BUREAU OF LABOUR STATISTICS : *Monthly Labour Review*, Vol. XI, No. 1, July 1920 : *Federal Intervention in Railway Disputes*, pp. 38-39. Washington, Government Printing Office.

responsibility laid upon him. The two mediators were overworked, and a larger commission for mediation and conciliation was evidently required. Mediators, too, should have the right of initiative in intervention, which right they did not have in the Erdman Act. There was also a growing feeling that the public should be represented on arbitral boards. The threat of a strike in 1913 accelerated the passage of the Newlands Act, which amended the Erdman Act by providing for two neutral arbitrators, and for a permanent mediation and conciliation board, with the right of initiative. Nothing was done to give specific representation to the public, unless the neutral arbitrators may be considered as fulfilling this function.

The Newlands Act was not unfavourably received, although it did not satisfy either the railways or the men. The former would have preferred compulsory arbitration, having entirely altered their views since 1888. Railway rates were now fixed by the Inter-State Commerce Commission, and it therefore seemed reasonable that wages also should be fixed by Federal authority. The men, on the contrary, were beginning to think that they could do better without arbitration at all. By 1913 they had developed, in the shape of nation-wide concerted action, a most powerful instrument for the gratification of their demands. They came to believe also, in the course of the next few years, that the selection of neutral arbitrators who should not be partial to the railways was next to impossible. Nevertheless, up to the end of 1919 131 disputes were settled under the provisions of the Newlands Act, and of these 109 were settled by mediation.

A new problem was created when in 1916 the four Brotherhoods demanded an 8-hour day with 10 hours' pay. This demand they were unwilling to submit to arbitration, stating that if it was not acceded to they would strike. Congress averted this calamity by passing the Adamson Act, which provided an 8-hour day for workers in active train service and appointed a commission to report on its operation. When there was some likelihood that the Act would be declared unconstitutional—it was subsequently declared constitutional by the Court—the Brotherhoods renewed their threat of a strike, but were induced, through the mediation of the Council of National Defence, to re-enter into negotiations, and a settlement was reached granting the basic or nominal 8-hour day. Thus the dispute was ultimately settled by compromise and mediation, backed by the balance of power in the hands of the workers.

A few months after the outbreak of war the railways were brought entirely under Federal control. About the same time there was a movement among the railwaymen for an increase in wages. A Wages Commission, created for the purpose, investigated the whole subject of railwaymen's wages, and reported in favour of a substantial increase. This was granted by the Government, which later gave further evidence of its goodwill by announcing that there would be no discrimination against railwaymen on account of their membership of any labour organisation, the former decision of the Supreme Court in the matter being ignored. One of the men's objections to arbitration was that the interpretation of the award was left to the employer. The Government now directed that adjustment boards composed of employers and men in equal numbers should be charged with the interpretation of wages agreements (other than those concluded through the Wages Commission), and with the adjustment of all differences which could not be settled by conference of the parties immediately

concerned. These boards worked most successfully, and during the period of Federal control labour difficulties were at a minimum.

The final stage in the history of Federal intervention occurs with the passage of the Transportation (or Esch-Cummins) Act of 1920. By this Act the railways were returned to their owners, but the machinery set up during the period of Federal control was perpetuated in a slightly different form. Regional boards of adjustment were to be set up to settle any grievances where a conference of the interested parties had failed to yield a positive result. The Act also created a Railroad Labour Board of 9 members, 3 representatives each for the railways and the men, and 3 appointed by the President, none of whom may be officially connected with any labour organisation or be pecuniarily interested in any railway. The Board's duties are to fix wages and to hear any dispute regarding grievances, rules, or working conditions which an adjustment board has been unable to settle. The full publicity to be given to decisions is the only means provided for their enforcement. The Board may also investigate relations between railways and men, and publish its conclusions.

The paramountcy of the public interest, established during the war period, is retained under the Transportation Act. Public opinion is still the only sanction for the awards of the Federal authority, but it is considered that it will be amply sufficient. The right of appeal to the Courts allowed under the Erdman and Newlands Acts was only twice taken advantage of, and never yielded any practical result. The power to investigate found in the Act of 1888, but not in either the Erdman or the Newlands Acts, re-appeared in the Adamson Act, where, however, it referred only to a specific dispute, and, in a much wider form, in the Transportation Act. In the latter Act, the men's objections to arbitration, namely that the neutral arbitrator was often partial and that interpretation of awards was left to the railways, are met by specific provisions. So far as the railways are concerned, it was clear that, as soon as the Inter-State Commerce Commission was invested with the right to control traffic rates, the correlative duty of fixing wages became incumbent upon Federal authority. Its power to fix wage rates was affirmed by the Supreme Court in 1917 and is embodied in the Transportation Act. The author of the report emphasises "the growing feeling on the part of the public that this is a problem for governmental activity", and the probability of even closer Federal control in the future, either by Government ownership, or by a system of stringent Government regulation, in order to minimise the danger of an interruption of inter-State commerce.

Two comments may be added. In a letter to the International Labour Office, Professor John R. Commons of the University of Wisconsin states: "The most significant thing by far in this country is the work of the Railway Labour Board. It is ostensibly voluntary arbitration, but it has turned out to be about the equivalent to compulsory arbitration and I believe far more effective." Against this may be placed the opinion of a former Joint Chairman of the National War Labour Board expressed in an article in *The Survey* (New York City) of 8 April 1922, to the effect that arbitration will prove quite ineffective as an instrument to achieve a more equitable distribution of the product of industry. He relies wholly on co-operation and political action.

Finally, it may be well to point out that the arbitration of railway disputes in the United States is receiving its test in a period of

depression and is without any background of experience during the period of a rising market. This is a very important feature to emphasise and will, no doubt, have much to do with the success of the arbitration method.

#### THE AGRICULTURAL CRISIS IN THE UNITED STATES AND ITS CAUSES

The Joint Commission of Agricultural Enquiry appointed by the United States Government in June 1921 has recently issued an account of its public hearings <sup>(1)</sup> and reports <sup>(2)</sup> on the various subjects which it was charged to investigate. These subjects included (1) the causes of the present condition of agriculture; (2) the cause of the difference between the prices of agricultural products paid to the producer and the ultimate cost to the consumer; (3) the comparative condition of industries other than agriculture; (4) the relation of prices of commodities other than agricultural products to such products; (5) the banking and financial resources and credits of the country, especially as affecting agricultural credits; (6) the marketing and transportation facilities of the country.

The reports are in four parts, two of which have already appeared <sup>(3)</sup>, dealing respectively with *The Agricultural Crisis and its Causes*, and *Credit*. The succeeding parts will be devoted to *Transportation* and *Marketing* and are expected shortly.

In Part I the aim of the Commission has been to give a review of the critical situation in agriculture in 1920/1921, and to interpret the influences, psychological and economic, which brought it about. It undertook to secure data for its conclusions by means of public hearings <sup>(1)</sup>, and also by making use of various departments of the Government, private agencies and associations, and individuals. The result is a mass of detailed information well assorted and presented, with comparative tables and charts so numerous that within the scope of a brief review reference can be made to only a few examples which appear of special interest.

In order to understand the condition of the American farmer following the unprecedented decline in prices in 1920 and 1921, his well-being is measured by the Commission by reference to four standards, as follows —

- (1) The purchasing power of the farmer's dollar;
- (2) The absolute prices of farm products as compared with the absolute prices of other groups of commodities;
- (3) The quantity production of agriculture as compared with the quantity production of other industries;
- (4) The income or reward for capital invested and labour employed in the agricultural industry as compared with the income or reward for capital invested or labour employed in other industries.

The farmer's well-being is not an absolute condition but a relative one, and that relation is determined by the amount which the product he raises will buy of other products. Accordingly, by means of charts and tables the value of the farmer's dollar may be estimated.

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<sup>(1)</sup> UNITED STATES OF AMERICA: *Hearings before the Joint Commission of Agricultural Enquiry*, Sixty-Seventh Congress, First Session under Senate, Concurrent Resolution 4. Vol. I, 690 pp.; Vol. II, 814 pp.; Vol. III, 862 pp.

<sup>(2)</sup> *Report of the Joint Commission of Agricultural Enquiry*. Part I: *The Agricultural Crisis and its Causes*, 240 pp.; Part II: *Credit*, 159 pp. Washington, Government Printing Office. 1921.

PURCHASING POWER OF ALL FARM PRODUCTS, IN TERMS OF ALL  
COMMODITIES, INCLUDING FOOD AND FARM PRODUCTS <sup>(1)</sup>

	1913	1914	1915	1916	1917	1918	1919	1920	1921
Jan.	97	101	103	98	98	111	109	99	76
Feb.	97	103	103	97	96	111	111	95	77
Mar.	100	104	106	97	101	113	113	94	77
Apr.	99	105	107	97	105	114	115	92	74
May	100	106	108	98	108	112	115	89	77
June	99	105	106	97	106	112	111	90	—
July	101	104	107	99	106	113	112	90	—
Aug.	100	106	107	102	111	113	107	88	—
Sept.	102	103	104	102	111	114	103	86	—
Oct.	102	104	104	105	114	109	103	80	—
Nov.	100	103	99	101	115	107	104	79	—
Dec.	102	101	97	97	112	107	103	76	—
Averages	100	103	103	98	107	112	110	89	—

(1) The methods of arriving at price indices are explained in detail in the report.

From the above table, for example, it appears that the farmer's dollar in 1920 was worth 89 cents and in May 1921 worth 77 cents. The statement is further made that during the twelve months ending 30 May 1921 it was worth less than in any preceding twelve months in thirty years.

The relation of prices of agricultural commodities to prices of other commodities is considered by years and by months (Chapter II). The groups compared include farm products, all commodities, food, cloths and clothing, fuel and lighting, metals and metal products, lumber and building material, chemicals and drugs, and house-furnishing goods. An analysis of the statistical tables shows that, in general, the prices of farm products began to rise above the prices of other commodities early in 1917, and reached their zenith that year, remaining relatively high until the latter part of 1919. Prices of other groups of commodities, however, were meanwhile rising and by January 1920 the prices of all groups except chemicals and drugs, fuel and lighting, and metals and metal products were above those for agricultural products. By October 1920 farm products were below all other groups, and by May 1921 were markedly so.

But better than prices and values as a measure of the progress and status of an industry is the quantity of its production. In Chapter III the relative growth of agriculture and other industries is considered and significant deductions drawn. In general the output of agriculture in the United States has not only lagged behind the growth in population, but to a much larger degree has failed to keep pace with the output of other industries. From 1889 to 1919 the increase in population was 39.7 per cent.; the increase in agricultural production was 37.6 per cent.; the increase in manufactured products was 95.3 per cent.; and the increase in the product of mines was 118.4 per cent. It is naturally concluded that prices for agricultural products have not been sufficient to induce an increase in output of these products comparable with the increase in output of the products of other industries.

Wages and incomes in agriculture are also compared with those in other industries (Chapter IV). In the following table (p. 57 of the report) the average annual reward of farmers engaged in agriculture (exclusive of hired help) is compared with the average annual earnings per employee in stated industries.

REWARDS OF FARMERS COMPARED WITH EARNINGS IN INDUSTRY

Year	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Average return to property produced per farmer	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Average reward per farmer for labour, risk, and management	331	336	353	363	376	410	444	499	614	795
Average yearly earnings by employees in mining industry	392	372	444	459	495	586	903	1,278	1,466	465
Average yearly earnings by factory employees	647	685	755	650	655	815	1,025	1,280	—	—
Average yearly earnings of employees in railway transportation	610	655	705	617	653	872	1,022	1,147	—	—
Average yearly earnings of employees in water transportation	705	747	782	723	728	849	1,063	1,394	—	—
Average yearly earnings of banking employees	773	808	825	807	880	1,081	1,306	1,532	—	—
Average yearly earnings of government employees	843	887	930	921	1,107	1,170	1,288	1,461	—	—
Earnings of employees in all industries, including hired help on farms	778	798	823	842	861	891	940	895	—	—
	648	692	723	674	7	843	957	1,094	—	—

Succeeding chapters in Part I of the Commission's report are entitled : The Break in Prices in Different Countries and Industries ; Was the Break in Farm Prices due to Overproduction of Farm Products ? ; Exports and Imports of Farm Products and their Effect upon Prices ; Production and Consumption of Farm Products and their Relation to Prices ; Factors influencing Cost of Production ; Farm Mortgages ; Farm Tenancy ; Transportation ; and Retail Prices. The increasing wages of agricultural labour are a significant factor in estimating the cost of production (Chapter IX). While wages of employees in agriculture were relatively lower than they were in other industries during the past thirty years, they have increased at a relatively faster rate than wages in other industries. This was due in part to the necessity of meeting industrial competition and in part to the fact that permanent agricultural labour must now be of a skilled character and consequently commands a higher wage than formerly. Farm expenditures for labour in the United States totalled \$651,611,287 in 1909, and \$1,363,454,380 in 1919.

The constructive policies recommended by the Commission as a result of their investigation are summarised as follows :

(1) That the Federal Government affirmatively legalise the co-operative combination of farmers for the purpose of marketing, grading, sorting, processing, or distributing their products.

(2) That the farmer's requirements for credit corresponding to his turnover and having maturity of from six months to three years, which will enable payment to be made from the proceeds of the farm, be met by an adaptation of the present banking system of the country, which will enable it to furnish credit of this character. It is expected that a concrete proposal to carry out this recommendation will be made in Part II of this report.

(3) That there should be a warehousing system which will provide a uniform liability on the part of the warehousemen and in which the moral and financial hazards are fully insured. To this end the Commission suggests the extension of the existing Federal warehouse law and the passage by the several States of uniform laws regulating the liability of warehousemen and the services rendered by them.

(4) The Commission believes that an immediate reduction of freight rates on farm products is absolutely necessary to a renewal of normal agricultural operations and prosperity and recommends prompt action by the railroads and constituted public authority to that end<sup>(3)</sup>.

(5) That there should be an extension of the statistical divisions of the Department of Agriculture, particularly along the lines of procurement of live-stock statistics.

(6) That provision should be made by Congress for agricultural attachés in the principal foreign countries producing and consuming agricultural products.

(7) The development by trade associations and by State and Federal sanction of more accurate, uniform, and practical grades of agricultural products and standards of containers for the same.

(8) That adequate Federal appropriations should be made for the promotion of better book and record keeping of the cost of production of farm products on the basis of the farm plant unit, as a basis for the development of more efficient methods of farm management.

(9) Provision for an extended and co-ordinated programme of a practical and scientific investigation through State and national Departments of agriculture and through agricultural colleges and universities directed toward reducing the hazards of climate and weather conditions and of plant and animal diseases and insect pests.

(10) More adequate wholesale terminal facilities, particularly for handling perishables at primary markets, and a more thorough organisation of the agencies of distribution of the large consuming centres of the country.

(11) The development of better roads to local markets, joint facilities at terminals connecting rail, water, and motor transport systems, and more adequate facilities at shipping points with a view to reducing the cost of marketing and distribution.

(12) That greater effort be directed to the improvement of community life.

(13) The renewal of conditions of confidence, and industrial as well as agricultural prosperity, is dependent upon a readjustment of prices for commodities to the end that prices received for commodities will represent a fair division of the economic rewards of industry, risk, management, and investment of capital. These conditions cannot be brought about by legislative formulas, but must be the result, for the most part, of the interplay of economic forces. The Government and the States within their respective spheres should do by legislative and administrative action what it may be possible to do, based upon sound principles to facilitate this readjustment.

In making the foregoing recommendations it must be understood that the jurisdiction of the Federal Government is limited and that it cannot directly regulate production, marketing, or transportation not the subject of inter-State commerce. Therefore the foregoing recommendations contemplate, in addition to legislation within the jurisdiction of Congress, action by State authorities within their respective jurisdictions and local and private interests, in order to achieve the objects sought.



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<sup>(3)</sup> Since this recommendation was agreed to, certain reduction in freight rates upon agricultural products have been made.

# BIBLIOGRAPHY

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## Book Notes

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### INTERNATIONAL PUBLICATIONS

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LEAGUE OF NATIONS : *Handbook of International Organisations (Associations, Bureaux, Committees, etc.)* 167 pp. Geneva. 1921.

This handbook gives information as to the technical commissions and organisations of the League of Nations, and as to nearly five hundred international organisations. The title, headquarters, date of foundation, object, distribution of membership, mode of management, financial resources, work accomplished, and a summary of the history and development of each organisation are given. The organisations are mentioned in alphabetical order, but are re-classified by countries according to the geographical situation of their headquarters, and again by their objects. This information is given in French. Several preliminary chapters, written both in French and English, describe the relations between the League of Nations and various international bureaux, and the methods of work of the League of Nations with its international Secretariat, and of the International Labour Organisation.

INTERNATIONAL COMMITTEE FOR RUSSIAN RELIEF: *Organisation et fonctionnement des services du Haut Commissariat en Russie*. Information No. 17. 12 pp. illustrated. Geneva, High Commissariat of Dr. Nansen. 1922.

The first part of this pamphlet is devoted to the general organisation of relief ; the second contains extracts from reports on the working of the services. According to these reports, the organisation of food supply is most satisfactory, the losses of goods in transit are negligible, the kitchens and bakeries regularly accomplish their task, and the distribution of food is effectively supervised. Generally speaking, the results may be said to be very encouraging.

FÉDÉRATION INTERNATIONALE DU BATIMENT ET DES TRAVAUX PUBLICS: *Conférence internationale, Bruxelles, 20-22 octobre 1921*. 87 pp. Paris, Bureau permanent, 17, Avenue Carnot. 1921.

Report of the International Conference of Employers in the Building Trades. The pamphlet contains a list of delegates of governments, federations, associations, etc., and the verbatim report of the sessions of the Conference<sup>(1)</sup>.

UNION INTERPARLEMENTAIRE: *Compte rendu de la IX<sup>e</sup> Conférence tenue à Stockholm du 17 au 19 août 1921*. xii + 317 pp. Geneva, Bureau interparlementaire. 1922.

In the first section, entitled *Preliminary Documents*, are collected the circular letters relating to the convocation of the Conference, the French, English and German texts of the agenda and proposed resolutions, together with three reports dealing respectively with the activities of the Interparliamentary Council

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<sup>(1)</sup> See the short report of the Conference and summary of the resolutions passed in the *International Labour Review*, Vol. IV, No. 3, Dec. 1921, p. 43.



since the Eighteenth Conference, held at the Hague in 1913, with the League of Nations, and with the organisation of means of enquiry and conciliation through the League. The second section gives a verbatim report of the proceedings. An appendix contains the French, English, and German texts of the resolutions adopted. In these the Conference expresses its desire to see the various states of Latin America enter the Parliamentary Union, affirms its confidence in the League of Nations and the International Labour Organisation, approves the amendments to the constitution of the Union, proclaims the necessity of the reduction of armaments throughout the world, decides to set up an interparliamentary economic and financial committee, sanctions the principle of enquiry and compulsory mediation in cases of dispute between nations, and demands the reduction of passport formalities to a minimum.

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## OFFICIAL PUBLICATIONS

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### FRANCE

CONSEIL GÉNÉRAL DE LA SEINE: *Rapport sur les travaux du Comité de patronage des habitations à bon marché et de la Prévoyance sociale du département de la Seine pendant l'année 1920, présenté par M. de Fontenay.* 97 pp. Paris. 1921.

The report states that the activities of the Committee during the year 1920 have been very restricted, for the building of houses was rendered difficult by the high cost of materials and labour, by lack of capital, and by an excessive rate of interest. The chief considerations today are the substitution of "horizontal development" for "vertical development" in the Paris area, and the relief of congestion by improved means of communication. The ideal to be realised is the "small detached house standing in its own little garden". It is desirable that private initiative should lead the way for the public authorities, but for the provision of housing at a very moderate rental for large families the co-operation of the public authorities seems indispensable. The report is well documented on the subject of the present state of the problem of cheap housing in the Paris area.

MINISTÈRE DES COLONIES: *Rapport au ministre des Colonies sur l'administration des territoires occupés du Cameroun, de la conquête au 1<sup>er</sup> juillet 1921.* Supplement to the *Journal officiel*, 7 Sept. 1921, pp. 415-492. Paris, Imprimerie des journaux officiels. 1921.

This report gives details of the Anglo-French operations in the Cameroons from the conquest of the territory to 1 July 1921, the *condominium*, the present state of legislation, and of land and fiscal policy, social legislation, industrial plant, the postal and telegraph services, the present condition of the country, and the proposals for the development of industrial plant. Appendices, which occupy half the available space, contain the text of the various Orders and Decrees issued during the period.

MINISTÈRE DES TRAVAUX PUBLICS. DIRECTION DES MINES, 2<sup>e</sup> BUREAU: *Statistique de l'industrie minérale et des appareils à vapeur en France et en Algérie pour l'année 1919, avec un appendice concernant la statistique minérale internationale.* LXXXVII + 246 pp. Paris, Imprimerie Nationale. 1921. 25 francs.

This report and its statistical appendix refer to the first year after the war, and account is taken for the first time of the restored provinces of Alsace and Lorraine. It is divided as usual into three chapters devoted to mineral exploitation, metal works, and steam engines.

## HUNGARY

MINISTÈRE DES AFFAIRES ÉTRANGÈRES: *Les négociations de la paix hongroise. Compte rendu sur les travaux de la délégation de paix de Hongrie à Neuilly-sur-Seine, de janvier à mars 1920.* Tome I: xii + 663 pp.; Tome II: viii + 583 pp.; Tome III a: vi + 419 pp.; Tome III b: Atlas. Budapest, Victor Hormyansky. 1920-1921.

In this work, published in Hungarian, French, and English, are collected a large number of documents relating to Hungary. The first volume contains all the Notes, with their appendices, presented by the Hungarian Peace Delegation before the promulgation of the peace conditions, as well as the text of the conditions themselves. In the second volume are included Hungarian observations on the peace conditions, and the modifications which those conditions have since undergone. The final volumes, IIIa and IIIb, contain statistical tables and maps, together with a detailed index.

## NORWAY

DEPARTEMENTET FOR SOCIALE SAKER: *Arbeilstiden i anleggs-og byggevirksomheter, lager- og transportbedrifter og i sten- og jord industrien.* 58 pp. Kristiana, Emil Mæstue. 1922.

— *Kvinneres Nattarbeide; en socialstatistisk undersøkelse.* 55 pp. Kristiana, Emil Mæstue. 1922.

— *Uthast til Lov om Arbeidervern med motiver.* 330 pp. Kristiana, Emil Mæstue. 1922.

Three reports issued by the Norwegian Ministry of Social Affairs on (a) hours of work in the building industry, warehouses and transport, and in stone and other mineral industries; (b) night work of women; (c) the Bill on labour conditions. A detailed analysis will be given in a subsequent number of the *Review* under the heading *Government Reports*.

## ROUMANIA

MINISTÈRE DE L'INDUSTRIE ET DU COMMERCE. DIRECTION GÉNÉRALE DE L'INDUSTRIE. OFFICE DES ÉTUDES ET ENQUÊTES: *La Roumanie économique.* li + 119 pp. illustrated. Bucarest, Imprimerie de la cour royale. 1921. 25 lei.

This publication contains a great deal of statistical information, clearly and attractively presented and arranged so as to offer a comprehensive picture of the economic activity of Roumania. There are chapters dealing with agriculture, industry, commerce, banking, mining, means of communication, publications, and the financial situation. The work is terminated by a series of statistical summaries relating to population, agriculture, forests, live-stock, fisheries, commerce, finance, co-operation, people's banks, industry, state monopolies, rail and water transport, and posts, telegraphs, and telephones.

## SWITZERLAND

### NEUCHÂTEL

DÉPARTEMENT DE L'INDUSTRIE ET DE L'AGRICULTURE. DIVISION DE L'INDUSTRIE: *Rapport de la Chambre cantonale de Commerce, de l'Industrie et du Travail à la Chaux-de-Fonds, Exercice de 1921.* 23 pp. La Chaux-de-Fonds, Imprimerie Courvoisier. 1922.

According to the report the crisis from which industry in the canton was suffering in 1920 has not become less acute in 1921. Restrictions of imports and the continuance of monopolies are shown to constitute an obstacle to the resumption of industrial activity.

## UNITED STATES

CONGRESS: SENATE COMMITTEE ON EDUCATION AND LABOUR: *West Virginia Coalfields; Personal Views of Senator Kenyon and Views of Senators Sterling, Phipps and Warren*. 30 pp. Washington, Government Printing Office. (67th Congress, Second Session, Senate Document, Report No. 457.)

This publication gives the report of the chairman of the Senate Committee on Education and Labour, which was directed by the Senate to investigate the strike and accompanying disorders in the coal mine region of West Virginia during the spring and summer of 1921.

Senator Kenyon recommends, for the future solution of difficulties between mine owners and workers in the coal region, the establishment of a tripartite board consisting of representatives of coal owners, mine workers, and the public. This board should be governed by certain principles in its procedure in settling disputes, but it is not proposed that it shall have the power of compulsion for enforcing its decisions, this being left to "an enlightened public opinion". Strikes and lock-outs pending the settlement of disputes should be prohibited. There should be right of organisation on both sides, and both coal owners and mine workers should be permitted "to bargain collectively through representatives of their own choosing". The standard work-week shall be six days, one day's rest in seven; the standard work-day is not to exceed eight hours, and punitive overtime is to be paid for in excess of the standard work-day.

The three Senators who dissent from Mr. Kenyon's views think that, if any system of arbitration is proposed for the industry, the labour unions which appear before the board should be incorporated bodies.

DEPARTMENT OF AGRICULTURE: *Plans of Rural Community Buildings*. Farmers' Bulletin 1173. 38 pp. Washington.

The United States Department of Agriculture has issued this *Bulletin* in order to meet the demand for plans for buildings specially designed for rural social-centre work. The general requirements of community buildings are considered with special reference to the kind of community to be served and the particular features which each may wish to emphasise. The *Bulletin* includes illustrations of various types of buildings and presents a number of floor plans.

DEPARTMENT OF LABOUR, BUREAU OF LABOUR STATISTICS: *National War Labour Board; History of its Formation and Activities, together with Awards and Documents of Importance in the Record of its Development*. 334 pp. Washington, Printing Office. 1922. (*Bulletin* of the United States Bureau of Labour Statistics, No. 287.)

Apart from boards set up for certain special industries or groups of occupations, the National War Labour Board was the principal war time adjustment agency created by the United States Government to settle labour disputes. It "served as an industrial supreme court for the period of the war". The Board represented a very considerable unification of labour policy on the part of the Government, and formed an integral part of the Department of Labour. Its constitutional principles, so to speak, were formulated by a Conference which preceded its organisation.

The Board consisted of an equal number of representatives of employers and wage earners under joint chairmanship, one chairman being chosen by each of the two parties. One of the joint chairmen was ex-President William Howard Taft, who was the public representative nominated by the employers. The other was Frank P. Walsh, former chairman of the Commission on Industrial Relations of 1912-1913, nominated by the workers.

The Board made 490 awards and findings, dismissed 392 cases, referred 315 for other methods of adjustment; 53 remained undecided at the time the Board ceased to function and one was suspended, making a total of 1,251 handled during the period of its existence. Its awards covered approximately 712,000 wage earners, 90,600 of whom were tramway employees.

The *Bulletin* in question is very largely a reprint of documents concerned with the activities of the Board. The first twenty-six pages summarise the history of the formation and activities of the Board and its work during the sixteen months of its activity, i.e. from 8 April 1918 to 13 August 1919.

### CALIFORNIA

INDUSTRIAL ACCIDENT COMMISSION: *Workmen's Compensation, Insurance and Safety Laws of the State of California. July 1921.* 74 pp. Sacramento, California State Printing Office. 1921.

This is a compilation, prepared by the Industrial Accident Commission, of the law relating to workmen's compensation in the State of California as it was in July 1921.

### MASSACHUSETTS

DEPARTMENT OF LABOUR AND INDUSTRIES: *Manual of the Labour Laws enforced by the Department of Labour and Industries. November, 1921.* XIV + 162 pp. Boston, State Printers. 1922.

"The *Manual* contains all of the labour laws enforced by the Department of Labour and Industries. It is based on the General Laws and covers the amendments passed in 1921. The laws regarding standards of weights and measures, the surveying of lumber, licensing itinerant vendors and measurers of leather are also enforced by the Department of Labour and Industry. A compilation of the legislation upon this subject is published as a separate *Bulletin*."

The compilation includes definitions of labour law terms, statement of powers and duties of the Department of Labour and of its inspectors; laws on education, health, and employment of minors and women; wages laws; laws on health and safety of employees, manufacture of clothing in tenement houses, terms of employment, hours, holidays; regulations governing public employment offices; legislation relating to conciliation and arbitration; and laws dealing with the statistics of industry. Rules and regulations, abstracts of legal opinions and reference to statutes cited, are given in the appendix. There is a full subject index.

### PENNSYLVANIA

DEPARTMENT OF LABOUR AND INDUSTRY: *Report of the Bureau of Employment for the year 1920* (*Bulletin* Vol. VIII, Series of 1921, No. 4). 47 pp. Harrisburg (Pa). Kuhn.

The activities of the Bureau and of its local offices are fully described, with special reference to its schemes for dealing with a shortage of farm labour by directing immigrants where they are needed, and recruiting college students on vacation. State employment offices are rendering employers an important service "in preventing employees from leaving their present jobs, in sending such employees back to their jobs which they were trying to leave, and in thus keeping down the troublesome and expensive turnover of labour". The *Report* is concluded by statistical summaries.

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## NON-OFFICIAL PUBLICATIONS

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*Association financière, industrielle et commerciale et Comité des Représentants des Banques russes à Paris; Mémoires présentés à la Conférence de Gênes sur la débâcle des Soviets et la restauration économique de la Russie.* xxi + 208 + 76 pp. Paris. 1922.

This work contains a series of special studies, the mutual relationship of which is explained in a twenty-page summary prefixed to the collection. The most interesting chapters are those which describes the "New Political Economy" of the Soviet Government and its first results; another which deals with Soviet law and future legislation; and finally a chapter (also published separately by the Russian Banks Committee) on Russian finance. The book is anti-Bolchevist in tone and its object is to warn foreign capitalists against the accepted idea that Russia can be considered solely as a source of raw materials. Its conclusion is that "the point of view of the State Socialist must be definitely abandoned as a harmful survival of the practices of war-time and the Communist period".

BESTAUX, Prof. Eugène: *Bibliographie tchèque.* 105 pp. Prague, Bureau officiel des Etrangers. 1921.

A bibliography of a certain number of works on Czechoslovakia in various languages (not including the Slav languages) arranged in alphabetical and in subject order.

BOUNATIAN, Mentor: *Les Crises économiques* (translated from the Russian by J. Bernard). xvii + 388 pp. Paris, Giard. 1922. 15 francs.

The first part of this work treats of economic crises in general and of the forms in which they appear. The second contains an analysis of the causes which determine the general movement of prices and a description of the mechanism of economic cycles. The third and final part is a study of overcapitalisation, its causes consequences.

BRUTTINI, Prof. Arturo: *Ramassage et utilisation des déchets et résidus pour l'alimentation de l'homme et des animaux, pour les engrais et les industries agricoles (1914-1920).* 336 pp., illustrated. Rome, Impr. de l'Institut international d'agriculture 1922. 20 francs.

Among the subjects to be treated in the enquiry on the intensification of agricultural production decided upon by the Fifth General Assembly of the International Institute of Agriculture in 1920 was included the study of measures for encouraging the recovery and utilisation of waste products. Professor Bruttini's monograph, presented to the Sixth General Assembly in 1922, is intended to provide a complete account of the subject, and to bring together all the chief processes which should be generally known. The work is strictly technical and intended for technical readers. It is divided into two parts. The first refers to legislative and administrative measures for the utilisation of waste products. The second, and much larger part, deals with the recovery, preservation, treatment, properties, and uses of these substances.

CELTUS: *La France à Gênes. Un programme français de reconstruction économique de l'Europe.* 186 pp. Paris, Plon-Nourrit. 1922.

This small book, in spite of its title, is not wholly written for the moment. It is the result of considerable research, and is rich both in facts and in com-

ment, so that it offers very interesting reading in the light of the present situation. It is divided into a critical and a constructive part. In the first the authors seek to disprove the contention that the economic misfortunes of Europe are the result of the Peace of Versailles. They point to errors of policy on the part of the nations as the principal causes of economic breakdown. Among the causes they mention the drift in British policy from free trade to a certain amount of protectionism. The economic situation in Russia and Germany is also analysed, and it is argued that the fall of the German mark has not been due to the payment of reparations.

The constructive part of the book is built up on the idea that our present economic sufferings are the result of the war, and not of the peace. A general restoration of transport systems and of international exchanges must come first. Then follows an analysis of the economic consequences which have arisen out of the cessation in the international flow and exchange of labour, the exchange crisis in Italy, the unemployment situation in England, the production crisis in France and in some other countries of immigration. The part to be played by private initiative is stressed, while the book concludes with the following words :—

Perhaps migration problems are those which could most suitably and legitimately be dealt with by the International Labour Office. However, it will in all probability not be necessary to ask for its intervention when it is a question of securing the rights of trade union or international organisations; but the Office might with advantage be instructed to study the technical points involved in the problem of the international exchange of labour, to estimate the labour resources of different countries, to consider the working of systems for the interchange of labour in Europe as existing before the war, their scope and success, and to suggest in what way and to what extent they could be re-established; in a word, the Office might supply to employers, who are still very ill informed as to the effects both of the war and of the peace on this particular problem, all information which is likely to be useful. An enquiry of this kind would afford the Office a valuable opportunity of contributing usefully to the solution of the unemployment problem.

CESTRE, Charles : *L'usine et l'habitation ouvrière aux Etats-Unis*. xxxvi + 301 pp. Paris. Ernest Leroux. 1921. 5 francs.

This book, which should be considered in conjunction with the previously published work of Mr. Cestre—*Production industrielle et justice sociale en Amérique* (\*)—is interesting from two points of view; first, because it gives numerous concrete examples of what has been done in the United States to improve the labour and housing conditions of the worker, and, secondly, because it explains the attitude of mind which has been responsible for these improvements. As the ideas which have guided the movement the author indicates solidarity, respect for human dignity, and consideration for spiritual values.

In the first part of the book, which deals with the factory, the author reviews measures intended to improve the hygiene, comfort, and safety of the workers. These measures seem to be of three kinds: (1) the use of adequate equipment, such as well-fitted sanitary installations and appliances for avoidance of fatigue; (2) the adoption of sound methods in such matters as decoration of buildings and the treatment of injuries; (3) the education of workers and employers, e.g. with a view to the prevention of accidents. The second part of the book refers to working-class dwellings. The author's view on this point is that America has not yet done all that is necessary in order to ensure suitable accommodation for all the workers in industry, but that she is nevertheless ahead of the other countries. One chapter is devoted to communal living, with particular reference to restaurants and opportunities for recreation and education. In conclusion, the author shows the advantages of factory magazines as organs of communication between the management in its relations to the workers.

(\*) Cf. CESTRE, Charles : *Production industrielle et justice sociale en Amérique*; pp. 342 Paris, Garnier 1921. 7 50 francs. This book was analysed in the *review* of Sept. 1921, Vol. III, No. 3, p. 433.

COLOMBINO, E.: *La Tragedia rivoluzionaria in Europa*. VII + 209 pp. Florence, Bemporad, Critica Sociale.

The present work, which is a simple connected commentary on the revolutionary movement in Europe after the war, is complementary to two previous books by the same author, one dealing with the labour movement in the republics of Central Europe, and the other with Soviet Russia. Mr. Colombino has studied both the Russian and the German-Austrian revolutions on the spot. He was struck by the profound differences in the character of these two movements: the one "economic, political, and social", the other, "exclusively political". He would explain these differences by diversity of social traditions, and by the need for adopting different revolutionary methods according to the environment in which the Socialist ideal is to be developed.

The second half of the work, which is entirely devoted to the study of the phenomenon of revolution in Italy, contains a summary of the chief events which have occurred there since the Armistice and a criticism of the trade union and political movements based upon the experience of the two revolutions already examined.

The work is preceded by a preface by the Socialist deputy, Mr. C. Treves.

ELVI ILIÉS, Alcaldard d', and HALARZ, Albert: *Magyarország Gazdasági Terképeiben*. 73 maps and 8 diagrams; published by Jules de Rubinek, Hungarian Minister of Commerce.

This is a useful collection of maps and diagrams illustrating the economic development of Hungary. They deal with climate, orography, internal and external traffic, natural sources of power, population and education, credit, agriculture, industry, and finance.

ESPINA Y CAPO, Dr. Antonio: *Las Enfermedades profesionales de la Ingeniería*. 138 pp. Madrid, Bailly-Baillière. 1921.

This report, presented to the first Spanish congress of technical workers, contains a short but complete statement of the problem of occupational diseases in industry. The principal subjects treated are physiology of work and fatigue, the diseases of the respiratory system, industrial poisoning, contagious and infectious diseases, diseases caused by parasites, physical conditions (heat, light, electricity), and factory inspection (co-operation of technical workers and doctors).

FOX, L. Henry: *A philosophic View of the Land Question*. 211 pp. London. The Kingsley Press, 1921.

Public landownership considered as the restoration of the land to the people is the theme of this book. A co-operative system of cultivation with real property protected by the state and the traditions of English leasehold left intact is the threefold solution which the author proposes for the land question.

GAEBEL, Dr. Käthe: *Stimmen zum Achtstundentag*. Soziale Praxis und Archiv für Volkswohlfahrt, No. 14, 5 Apr. 1922, pp. 383-388. Berlin.

An examination of the attitude taken by workers', employees', and employers' organisations and by economists in Germany on the 8-hour day.

HOUSTON, Harold W., WALSH, Frank P., LAUCK, W. Jett: *Before the Committee on Education and Labour, United States Senate; Brief on behalf of United Mine Workers of America*; pp. 146. Washington 1922.

This pamphlet is a statement of the demands for reform being made by the organised mine workers on behalf of their members and unorganised miners in the coal mines of West Virginia. It is an analysis of the coal mining labour situation from the workers' point of view. It discusses the control which mine owners exercise, not only over the economic welfare, but over the political rights of mine workers in West Virginia. There is a chapter on the significance

and advantages of trade union organisation, the historical basis of collective bargaining in the United States, and a description of labour conditions in the West Virginia region.

NATIONAL INDUSTRIAL CONFERENCE BOARD: *The Unemployment Problem*. Research Report No. 43. 91 pp. New York, The Century Co. Nov. 1921.

The matter of this study is grouped in three principal sections. The first contains statistics of the extent and fluctuation of unemployment in various industries. In the second the causes of unemployment are considered; in regard to the organisation of manufacturing establishments, distinction is made between internal and external causes. The internal causes are referred either to personal factors such as strikes, lock-outs, and sickness, or to impersonal factors such as excessive cost of production, lack of appropriate equipment, and ever-extending application of machinery. The external causes are subdivided in turn, according as they are of economic origin, such as the general relation between cost of production and selling price, or of political origin, such as immigration, tariffs, etc. The third section of this study is devoted to the remedies which it would be possible to apply to the various causes of unemployment enumerated. For the personal causes of unemployment, strikes and lock-outs, the remedy suggested is that closer contact should be established between manufacturers and workmen by means of joint committees; for the impersonal causes a remedy is to be sought in increasing demand by lowering price. With respect to external causes, seasonal unemployment will be eliminated as far as possible by combining industries which are complementary to each other, and by improving facilities for finding work. At a time of crisis export must be stimulated by a reduction in the cost of transport. As for the political factors which intervene in the causes of unemployment, it is a matter of stricter control of immigration and of revising the general system of taxation. Finally, so far as the present situation is concerned, this study would suggest as temporary measures the creation of unemployment funds, part-time work by shifts, and organisation of relief works by public authorities.

PARTI OUVRIER BELGE, CONSEIL GÉNÉRAL: *Rapports présentés au XXXIII<sup>e</sup> congrès annuel tenu à Bruxelles à la Maison du peuple les 15, 16 et 17 avril 1922*. 560 pp. Brussels, Impr. coopérative Lucifer. 1922.

Among these numerous reports, which relate to a great variety of subjects, attention may be drawn to those of the Bureau of the General Council, the Information Bureau (p. 177) and the headquarters of the working class education organisation (p. 267), together with various reports on the activities of co-operative associations, mutual insurance associations, and trade unions. A report on social legislation testifies to the value of the information to be found in the publications of the International Labour Office. Another report emphasises the fact that co-operation, sometimes misunderstood by trade unionists, has largely helped Socialist activity in Belgium to become as powerful and irresistible as it is.

LOUIS, Paul: *La crise du socialisme mondial de la II<sup>e</sup> et III<sup>e</sup> Internationale*. 192 pp. Paris, Alcan, 1921. 8 francs.

This book retraces the evolution of international Socialism according to the Communist conception. According to the author the Socialism of the Second International, starting from the Marxian principles of the First International, i. e. a permanent class war, illegal propaganda, catastrophic revolution, dictatorship of the proletariat etc., had gradually lost touch with its own principles and had, even before the war, abandoned the idea of applying them in their entirety. Behind programmes as uncompromising as ever were developing tendencies of a conciliatory and Reformist character. The International, feeble as it had thus become, could neither prevent the war of 1914, nor exploit the social and political convulsions of 1918. The reconstruction of Socialism was, therefore, indispensable, says the author, and could only be effected by the return to orthodoxy, both in doctrine and in action. This is the work which the



Third International is engaged in accomplishing. In a final chapter the author is concerned to demonstrate that there exists an absolute identity between Marx's theses and the programme of action of Moscow.

LÜDERS, Else: *Zur Frage des Schwangeren-und Wöchnerinnen-schutzes in der Landwirtschaft*. Reichs-Arbeitsblatt No. 5, 15 Mar. 1922, pp. 157-159. Berlin, Reichsamt für Arbeitsvermittlung.

A comparison of the measures in force in various countries for the protection, before and after childbirth, of women wage earners in agriculture, in relation to the recommendation of the Third International Labour Conference at Geneva.

MORTARA, Giorgio: *Prospettive economiche 1922. Opera edita sotto gli auspici della Università Bocconi di Milano*. 384 pp. Città di Castello, Soc. tip. "Leonardo da Vinci". 1922.

A statistical survey of Italian industry at the end of 1921 from the point of view of production. The industries dealt with are grain, wine, olive oil, fruit and vegetables, silk, cotton, hemp, wool, coal, electric power, iron, land and sea transport. In each case there are statistics of world production and Italian production and of exports for a series of years, a discussion of the factors affecting production and consumption, and a brief summary of the outlook in Italy for each industry in the immediate future. There are also sections dealing with national finance, money, and labour. In the last section, which is very short, the author sums up briefly the causes which have led to the present industrial unrest and his reasons for thinking that a condition of less unstable equilibrium is in sight. His summary of the immediate outlook for labour is: abundant supply and moderate demand; reduced pay and increased output; restricted emigration later on. He is of opinion, however, that the reduction in costs which manufacturers consider essential will be best achieved, not by reduction of wages but by improvements in the technique of production and in methods of distribution, increased effort on the part of the workers, and restriction within fair limits of the profits of producers and middlemen.

THE P. H. PEARSE STUDY GROUP: *An Economic Programme for the Irish Free State*. 31 pp. London, Fisher Unwin. 1922. 6d.

The programme consists of a set of seventeen principles accompanied by explanatory comment. They embody a policy of wide distribution of landed property, industrial unionism, and democratic credit control, as advocated by Major C. H. Douglas.

PERRETTI - GRIVA, D. R.: *Il Contratto di Impiego privato*. 266 pp. Milan. Soc. Ed. Libreria. 1920. 16 lire.

Although published more than a year ago, this detailed commentary on the Decree of the 9 February 1919 relating to private labour contracts can along with Falletti's work, which deals with the same subject<sup>(\*)</sup>, afford useful information to those who are studying labour legislation whether from the theoretical or practical point of view. Instead of following the order of the Articles of the Decree the author has adopted another, at once systematic and logical. Having explained succinctly the characteristics of the Decree and its precedents, he defines the conception of individual contract, dwells at considerable length on labour contracts of indefinite duration (pp. 51-161) and of definite duration, and, finally, discusses the question of competence to settle disputes arising out of the application of contracts.

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(\*) FALLETTI, PAOLO: *Il contratto d'impiego privato*. Milan, Sironi. 1920.

RAYNAUD, Barthélemy: *Le Contrat collectif en France*. Paris, Arthur Rousseau, 1921. 12.50 francs.

In this volume Mr. Barthélemy Raynaud has completely recast his earlier work of 1901. He has left the subject of collective contracts abroad to be treated in the second volume, which is now in preparation, and in the present work, which refers only to France, he is concerned to give a popular exposition of the subject. Addressing himself mainly to members of employers' and workers' organisations, whose business it will be to negotiate collective contracts, he endeavours to reply to three essential questions: (1) the economic problem—what is the state of development of collective contracts in France at the present moment? (2) the legal problem—what legislation is there affecting such contracts? (3) the practical problem—what are the clauses which may usefully be inserted in a collective contract and what are the means of ensuring that they shall be carried out?

The conclusion of the author is that "not the employers, not the dreams of collectivists, but the collective contract itself appears as the practical and peaceful means of gradually translating into the domain of facts most of the legitimate social aspirations of democracy".

REINHOLD, W.: *Die Gaertnerei als Objekt der Gesetzgebung*. 48 pp. Berlin. Hauptvorstand des Verbandes der Gärtner und Gärtnerarbeiter.

The author deals with questions of the legal status of gardening in Germany. He defends the standpoint that gardening should be regarded not as a form of agriculture, but as a branch of trade to which the Federal Industrial Code (*Gewerbeordnung*) is applicable. Extracts are given from decisions of courts and administrative authorities supporting this view, and various facts are quoted to disprove the claim of the employers who are making efforts to have gardening classified as an agricultural business and to obtain for themselves the advantages in respect of taxation and labour legislation which are accorded to agriculture. The principle of differential legal treatment of labour in agriculture, on the one hand, and in manufacturing industries and commerce, on the other, is opposed and uniform legislation for all kinds of employment is demanded.

SAVOY, Dr. Emile: *La charte internationale du travail*. 31 pp., Frimbourg, Impr. Saint-Paul. 1921.

This pamphlet reproduces two speeches delivered by Dr. Savoy before the Swiss Council of State in the course of a debate on the decisions of the Washington Conference of the International Labour Organisation. After reviewing the earlier phases through which the idea of the international regulation of labour has passed, the author examines its latest phase, as revealed in the labour provisions of the Treaty of Versailles and the decisions arising therefrom. What characterises the present phase is the attempt to introduce uniformity into conditions of labour throughout the world without differentiation of occupations. In some cases this method may be justly applied, as in the prohibition of the employment of harmful materials such as white lead. But there are other industrial problems, and such, in the author's opinion, is that of hours of labour, which cannot be thus simply regulated. Any such problem should be treated by each trade or profession separately, and only that kind of international regulation which arises from the co-ordination, under the aegis of the International Labour Organisation, of the national efforts of the employers and workers in each occupation, can be expected to be really practicable.

The author also advances arguments, physical, social, and economic, against the adoption of the 8-hour day in industry, and emphasises the alarm which the idea of the 8-hour day in agriculture has created among the agricultural classes.

SERÇA, A.: *La Richesse agricole et la prospérité*. 251 pp. Paris. Marcel Rivière. 1921. 8 francs.

The author of this book re-states and contrasts the theories of the best known thinkers of the last century, the arguments of rival schools of thought

being very fully set out. The major portion of the volume is concerned with the question as to whether production or consumption should be the determining factor in practical economics rather than with an attempt to solve economic problems, but in the concluding chapters the author declares for the consolidation of lands which have been excessively sub-divided in France and for the gradual adoption of independent farming, preferably with rental on long lease as an intermediate step to full ownership.

STONE, Gilbert: *Laws and Regulations relating to Lead Poisoning*. 250 pp. London. Imperial Mineral Resources Bureau. 1922. 5s.

The Imperial Mineral Resources Bureau in London has just published a study by Mr. Gilbert Stone on the laws and regulations relating to lead poisoning in force in various countries.

In the first part of his work, which serves as an introduction, the author indicates the legislative measures which have been taken in the following industries: (1) lead mining; (2) lead smelting; (3) white lead; (4) manufacture of paints and colouring matter; (5) pottery (manufacture and decoration); (6) electric accumulators; (7) use of colouring matter; (8) lead-coating; (9) vitreous enamelling; (10) the twisting of wire dipped in lead; (11) file-cutting; (12) bronzing, lithographic and printing processes. The legislative texts are reproduced in full in the second part of the volume. A special chapter is devoted to the question of compensation. The British regulation dated 23 August 1921 on the manufacture of lead compounds (carbonate, sulphate, and acetate of lead, etc.) as well as the Act relating to the employment of women and young persons in lead industries (November 1921) are given in an appendix.

In the preface, dated January 1922, Mr. Stone points out that he was not able to cite the text of the resolutions on the use of white lead adopted at the International Labour Conference held in October 1921 at Geneva, as his book was already in press. It is to be regretted, nevertheless, that the author did not insert the resolutions in an appendix and that he has omitted to mention the laws recently put into force in Poland and Greece.

TARDY, Marcel: *La Conférence internationale du Travail. Extrait de la Revue de France*. 22 pp. Jan. 1922.

The discussion of the International Labour Organisation contained in this pamphlet is based on ideas and political science not now widely current. Perhaps the following quotation best presents the point of view of the author.

"The interests of those nations who, like Italy, find themselves under a disadvantage in certain respects are much better served by private agreements between nation and nation than by an over-subtle policy which endeavours to slip through to its goal by the devious paths of such an assembly as that of Geneva. It is not by infecting others with one's own disease that one can cure oneself. Threatened as they are by demagogues and enveloped by a web of intrigue, the nations remain on their guard. They feel vaguely that their vital interests are in question, and their attitude becomes reserved. A foetid atmosphere of hate and distrust is interposed between them and frustrates the simplest agreements, which a frank and direct discussion between their authorised representatives would easily have concluded."

TRADES AND LABOUR CONGRESS OF CANADA: *Canadian Congress Journal*. Ottawa.

The *Canadian Congress Journal*, the first number of which appeared in January of this year, is to be the official magazine of the Trades and Labour Congress of Canada, and is to provide a medium of publicity whereby the official declarations of the Congress, the demands of labour for legislative reforms, and news of trade union and social development throughout the world may be transmitted regularly to its membership and the public. The official announcement in the first number of the journal states: "We shall aim to place the declarations of the Trades Union Movement before the public and keep them

fully informed of current events without prejudice and without abusing conflicting interests, believing sincerely that truth in its simplest form is the best weapon ultimately to remove such injustices as at present exist in our social and industrial life. "

The contents for January include articles on The International Labour Office, by Tom Moore ; Immigration to Canada in 1921 ; Peaceful Picketing ; Unemployment Relief ; Workmen's Compensation ; National Joint Conference Board of the Building and Construction Industries ; Standards for the Employment of Women ; and Legislation arising out of Sessions of the International Labour Conferences. Among the February articles are those on The Russian Famine and its Relief, by Dr. Nansen ; The 44-hour week in the Printing Industry ; Workers' Legislative Programmes submitted to Provincial Governments ; The International Emigration Commission ; Working Women and World Affairs ; The Canadian Council for Scientific and Industrial Research ; and Minimum Standard of Living in Canada.

VERBAND DER GEMEINDE- UND STAATSARBEITER: *Protokoll der Verhandlungen der Reichskonferenz der Gas-, Elektrizitäts-, und Wasserwerkesarbeiter am 20., 21., und 22. Januar 1922 in Kassel.* 116 pp. Berlin. 1922.

This account of the General Conference of Workers in gas, electricity, and water supply in Germany includes papers on the socialisation of electrical industry, on the technical development of gas, electricity, and water works, and on the influence which this development may have on conditions of work and on wages. The subjects discussed were the municipalisation, the return to private ownership, and the socialisation of industrial establishments, also the function of works' councils. Professor Chayes gave a lecture on the risk of accident and occupational diseases in the industries of gas, electricity, and water supply.

WEIGERT, Dr. Oscar: *Das Gesetz über die Beschaeftigung Schwerbeschae-digter.* Third edition, rev. and. enlarg., with the assistance of Dr. Otto WOELZ. 100 pp. Berlin, Vossische Buchhandlung. 1921.

This discussion of the compulsory employment of the disabled, compiled by two experts on the subject, contains first the text of the important German Act on the compulsory employment of seriously disabled men and the regulations for the application of the Act and, secondly, a detailed and up-to-date note showing the relation between the legislation concerning men disabled in industry and in war and labour legislation in general. There is also an historic survey of the problem, which may offer some guidance as to the dismissal from employment of the seriously disabled. This is a question demanding careful consideration, for which various special provisions are contained in the Act which will considerably affect its success. The authors describe an example of the application of the Act to German industry and the measures in force in the central German lignite mines.

A new Act on the subject has just been passed, but as it only extends the period within which a disabled man may not be discharged without the consent of the authorities, the value of the book is not affected.

## Recent Literature on Industrial Hygiene <sup>(1)</sup>

(continued)

### GENERAL

(78) ASSOCIATED COMM. ON IND. FATIGUE OF THE RESEARCH COUNCIL OF CANADA : *Industrial Hygiene in Toronto*. The Nation's Health, Mar. 1922, No. 3, p. 20 Adv. Chicago.

### Buildings

(79) KROFF : *Neuzeitliche Desinfektionseinrichtung für Fabrikbetriebe, Eisenbahn-Viehswagen und Krankenhäuser, sowie Handelsschiffe*. Zentrbl. f. Gewerbehyg., Feb. 1922, No. 2, pp. 59-60. Berlin.

### Ventilation

(80) NATIONAL SAFETY COUNCIL (statement prepared by) : *Standards in Industrial Ventilation*. The Nation's Health, Mar. 1922, pp. 168-170. Chicago.

(81) PURDY, J. S. : *Lighting and Ventilation of Factories, Hours of Labour and Health*. Jour. of Ind. Hyg., Mar. 1922, p. 349. Boston.  
[See also Nos. (96)-(100).]

### Gases — Smoke — Fumes

(82) FELSCH, P. : *Verflüssigte und verdichtete Gase*. Zentrbl. f. Gewerbehyg., Feb. 1922, No. 2, pp. 51-4. Berlin.

(83) ROCA, M. : *Une méthode pour neutraliser les vapeurs d'acide cyanhydrique*.

[Note du Dr Martinez Roca présentée au Comité de l'Office Intern. d'Hyg. Publique, dans sa session d'octobre 1921, par le Dr. PULIDO.] Bullet. mensuel de l'Office intern. d'Hyg. publique, No. 2, Feb. 1922, p. 124. Paris.

### Conditions due to External Factors

(84) KOINUMA, Bogo : *On the Influence of Severe Heat to the Labourers*. General Meeting of the Japan Hygienic Society, 20 Nov. 1921. Tokio.

### Factory Inspection

(85) KUPFER, J. : *Ausbau der staatlichen Handelsaufsicht*. [Vortrag gehalten in der Hauptversammlung des Vereins deutsch. Gewerbeaufsichtsbeamten am 27. Aug. 1921, Dresden.] Zentrbl. f. Gewerbehyg., No. 2, Feb. 1922, pp. 41-6. Berlin.

(86) SCHLIPPE, R. : *Grundsätzliche Aenderungen im Aufbau der Sächsischen Gewerbeaufsicht*. Zentrbl. f. Gewerbehyg., Feb. 1922, No. 2, pp. 33-41. Berlin.

(87) TELEKY, L. : *Stellung des Gewerbearztes*. Zeitschr. f. soz. Hyg., Vol. III, No. 7, 1922. Berlin.

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(1) See *International Labour Review*, Vol. V, No. 5, pp. 847 et sqq.

*Factory Legislation*

- (88) LE ROY, E. : *La nouvelle réglementation des établissements classés*. Ann. d'Hyg. Publ. et de Méd. légale, Feb. 1922 ; pp. 65-132. Paris.

## HYGIENE AND HEALTH IN TRADES AND OCCUPATIONS

*Mining*

- (89) *The Health of the Indigenous Rand Miner*. The Lancet, 25 Mar. 1922, p. 593. London.

*Metallurgical Industries*

- (90) MONTI, E. : *Igiene industriale : profilassi del saturnismo nelle fonderie di Pertusola*. Boll. Lega Ligure Igiene sociale, No. 1, 1922. Genoa.

[See also Nos. (92), (99), (132)-(134), and (173).]

- (91) WYLIE, A. : *The Danger of "Steel Scrubbers"*. The Lancet, 1 Apr. 1922, p. 626. London.

*Other Industries handling Non-Metallic Minerals*

- (92) NEW SOUTH WALES BOARD OF TRADES : *Report on White Lead as used in the Painting Industry : Its Dangers and their Prevention*. LXXIX+771 pp. Sydney, Gullick, Government Printer. 1921.

[See also Nos. (90), (99), (132)-(134), and (173).]

- (93) JERUSALEM, M. : *Typische Verletzungen der Industrie — und Bauarbeiter* ; paper read at the Gesellsch. der Aerzte, Wien, Sitzung vom. 10. Februar 1922. Wiener med. Wochenschr., No. 8, 18 Feb. 1922, p. 355.

- (94) REICHERT, H. : *Berufsschädigungen bei Glasbläsern in der Mundhöhle und am Zahnsystem*. Zentrbl. f. Gewerbehygiene, Jan. 1922, No. 1, pp. 1-7. Berlin.

- (95) SHUFFLEBOTHAM, Dr. (summary of a speech by) : *Les maladies des potiers*. L'Ouvrier Céramiste, Mar. 1922 ; p. 4.

*Textile Industries*

- (96) MARTELL, P. : *Entstaubungsanlagen in Hutfabriken*. Der deutsche Hutarbeiter, Mar. 1922, No. 9. Altenburg.

- (97) MEDICAL RESEARCH COUNCIL, INDUSTRIAL FATIGUE RESEARCH BOARD : *An Analysis of the Individual Differences in the Output of Silk-Weavers*. By P. M. ELTON. Report No. 17 (Textile Series No. 4) ; pp. 38. London, 1922.

*Chemical Industries*

- (98) BUCHANAN, R. E. : *Agricultural and Industrial Bacteriology* ; pp. 468. New York and Lond., Appleton, 1921.

- (99) LEHMANN, K. B. : *Der Gesundheitszustand der Arbeiter in den Bleifabriken und der Maler in Deutschland im Jahre 1920 u. 1921*. Zentrbl. f. Gewerbehyg., Feb. 1922, No. 2, pp. 46-51. Berlin.

[See also Nos. (92), (132-134).]

- (100) WINSLOW, C.-E. A. & GREENBURG, L. : *Notes on the Efficiency of Various Systems of Air-Conditioning in a Munition Factory*. United

States Public Health Reports, Vol. 37, 10 Feb. 1922, pp. 275-291. Washington, Government Printing Office.

#### *Public Utility Services*

(101) *Le malattie professionali degli zincografi. Il Fotoincisore*, Mar. 1922, No. 3, pp. 1-2. Milan.

[See also No. (144).]

(102) OKAJIMA, Hisashi : *A Statistical Study of the Diseases of the Ear, Nose, and Throat among the Railway Engineers*. Nihon Tetsudoi Kyokwai Zasshi (Jour. of Japan Railway Med. Officers' Ass.), Vol. VII, No. 9, Sept. 1921. Tokio.

#### *Commerce and the Professions*

(103) MONTI, G. and MASSA, E. : *I maestri assenti per malattia e il danno dei certificati medici irregolari*. Il Policlinico, 13 Mar. 1922, No. 11, pp. 368-9. Rome.

### HYGIENE AND HEALTH OF THE WORKER

#### *Personal Health*

(104) BURNHAM, A. C. : *Present Condition of Child Health in Central Europe*. Journ. Amer. Med. Ass., No. 6, 11 Feb. 1922, pp. 454-6. Chicago.

#### *Vocational Guidance and Selection*

(105) HOUDRÉ, M. : *La valeur physique de l'enfant ; son contrôle*. Rev. de l'Enfance, Mar. 1922, No. 7, pp. 252-63. Paris.

(106) LAHY, M. : *La sélection des travailleurs dans ses rapports avec l'hygiène mentale*. Paper on the agenda of the First Internat. Congress of Mental Hygiene, Paris, 1-4 June 1922.

(107) MILES, G. H. : *Vocational Selection*. Welfare Work, Mar. 1922, No. 27, pp. 43-44. London.

(108) MUMFORD, A. A. : *Estimation of Physical Fitness*. The Lancet, 11 Mar. 1922, pp. 478-479. London.

[See also No. (130).]

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(109) RICAMBONI : *Il sistema Taylor e il medico*. Bollett. dell' Assoc. Med. Tridentina, Jan. 1922.

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(110) *Industry and Preventive Medicine*. The Nation's Health, Mar. 1922, pp. 171-2. Chicago.

(111) *Surgical Technique Employed at United States Public Health Service Hospital*. United States Public Health Reports, 27 Jan. 1922, No. 4. Washington, Government Printing Office.

(112) RANELLETTI, A. : *Assistenza medico-sociale agli operai. Relazione sul primo anno di funzionamento dell' ambulatorio della nuova Città-Giardino all' Aniene* (Novembre 1920-Ottobre 1921). Rome, Centenari, 1922.

(113) BRUNDAGE, D. K. : *Records of the Small Sick-Benefit Association as a Source of Statistics for the Factory Medical Department*. United States Public Health Reports, 24 Feb. 1922, No. 8, pp. 413-22.

(114) MULON, Mme : *Dangereux préjugés sur la désinfection des crèches*. Paper read at the Acad. de Méd., 28 Mar. 1922. La Presse Méd., 1 Apr. 1922, p. 283.

(115) REHBERG, Dr. : *Wohlfahrtspflege in der Kleinstadt und ärztliche Mitwirkung*. Klin. Wochenschr., No. 9, 25 Feb. 1922, pp. 426-8. Berlin.

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(116) ESPINA Y CAPO : *Las Enfermedades Profesionales de la Ingeniería*; Estudio de Higiene Social; pp. 138. Madrid, Bailly-Baillière, 1921.

(117) DEARDEN, W. F. : *Health Problems Affecting Industry*. Welfare Work, Mar. 1922, No. 27, pp. 46-8. London.

(118) FORBES, D. : *The Infantile Mortalities of Rich and Poor*. The Lancet, Mar. 4, 1922, p. 426. London.

(119) CEDER, G. : *Der Index ponderis des menschlichen Ernährungszustandes und die Quäkerspeisung*. Deutsche med. Wochenschr., No. 4, 26 Jan. 1922. Leipzig.

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(120) FISK, E. L. : *Fatigue in Industry*. Amer. Journ. of Public Health, Mar. 1922, No. 3, pp. 212-17. Chicago.

(121) GELLHORN, E. : *Uebung und Ermüdung. I. u. II. Mitteilung*. Pflüg. Arch., Vol. 189, Nos. 1-3, 1922. Berlin.

(122) OPPENHEIMER, E. A., and SPAETH, R. A. : *Fatigue and Infection*. Amer. Journ. of Hyg., 1922, Vol. II, p. 51. Baltimore.

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(124) MERELLI, G. : *Ricerche pneumografiche durante la emissione della voce parlata e cantata*. Soc. med. di Parma, Session of 27 Jan. 1922.

(125) PIERY and MICHEL : *Le débit respiratoire dans les ascensions en montagne et en avion*. Soc. Méd. des Hôpitaux, Lyon, 14 Mar. 1922. La Presse Méd., 25 Mar. 1922. Paris.

(126) SENNER, W. : *Atmung in bewegter Luft*. Pflüg. Arch., Vol. 190, Nos. 1-3, 1922. Berlin.

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(128) MOURGEON, A. : *Etude sur la tension artérielle avant et après l'exercice*. Thesis for Doctor's Degree. Paris, 1922.

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(129) KO-CHO-KO : *Estimation of Excentric Color Vision*. Regular Meeting of the Kinki Ophthalmol. Soc., 13 Nov. 1921. Tokio.



- (130) SELIGMANN, S. : *Die Zauberkraft des Auges und das Berufen* ; pp. 566. Hamburg, Friedensschön. 1922.

*Poisonings : (a) General*

- (131) WOLFF, G. : *Metallvergiftung im Gewerbeleben*. Die Technik, Jan. 1922, No. 1, pp. 1-3. Düsseldorf.

[See also No. 101].]

*(b) Metals and Metalloids*

- (132) D'AFFLITTO, R. : *Colica epidemica apiretica. Saturnismo*. Il Policlinico, Sez. Prat., 3 Apr. 1922, pp. 453-4. Rome.

- (133) GOADBY, Sir K. : *Lead Poisoning in Industry*. Journ. of. State Med., Mar. 1922, No. 3, pp. 93-112. London.

- (134) RANELLETTI, A. : *Il saturnismo professionale e la Conferenza intern. del lavoro di Ginevra*. Il Mondo, No. 23, 1922. Rome.

[See also No. (173).]

- (135) BROWN, O. H. : *Treatment of Mercuric Chlorid Poisoning*. Missouri State Med. Ass. Journ., Feb. 1922. No. 2, p. 77. St. Louis.

- (136) JOACHIMOGLU, G. : *Dosis letalis des Arseniks*. Klin. Wochenschr., No. 4, 1922. Berlin.

- (137) KRAUSE, P. : *Vergiftungsfälle mit Baryumpräparaten bei Röntgenuntersuchungen*. Deutsche med. Wochenschr., 10 Mar. 1922, pp. 319-20. Leipzig.

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- (138) HAMILTON, A. : *The Growing Menace of Benzene (Benzol) Poisoning in American Industry*. Journ. of the Amer. Med. Ass., 4 Apr. 1922, No. 9, pp. 627-30. Chicago.

- (139) CÉTINGER, M. : *Intoxication chronique professionnelle par le benzol*. Soc. de Méd. Lég., Paris, 13 Mar. 1922. La Presse Méd., 29 Mar. 1922, p. 273.

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- (141) GOLDBERGER, J. and TANNER, W. F. : *Amino-Acid Deficiency probably the Primary Etiological Factor in Pellagra*. United States Public Health Reports, 3 Mar. 1922, No. 9, pp. 462-88. Washington, Government Printing Office.

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- (142) *Anthrax in Animal (Horse) Hair*. The Nation's Health, Mar. 1922, p. 174. Chicago.

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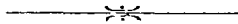
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### Errata to Volume V

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1922

No. 3, March, p. 463, line 1 (*Trade Union Organisations*) :

*for* : The General Federation of Japanese Labour (*Rodo Kumiai Domei Kai*)

*read* : The General Federation of Japanese Labour (*Nihon Rodo Sodomei*).

No. 4, April, p. 567, line 23 (*Industrial Welfare Work in Great Britain*) :

*for* : Joint Committee of the Woolwich Labour Party

*read* : Joint Committee of the Woolwich Trades and Labour Council and the Woolwich Labour Party.

No. 5, May, p. 721, last line of text (*Vocational Guidance*) :

*for* : Germany, France, and Great Britain

*read* : Germany, France, Great Britain, and Italy.

No. 6, June, p. 869, note (31), line 2 (*Trade Union Development in the United States*) :

*for* : 10.000

*read* : 65,000.

