



INDUSTRIAL RELATIONS



The Trade Union Movement



IN the months of June and July, an unusually large number of trade union conferences were held throughout the world. It was characteristic of most of these conferences that interest was centred, not so much in purely technical questions relating to the industries concerned, as in wider problems arising from industrial relations as a whole. In almost every conference of national organisations attempts were made to take a wide view of the problems which face the whole of industry, and in a large number of cases the question which aroused the most interest was the orientation of the various trade union movements. Particularly in France, in Spain, in Italy, in the United States, and in Germany was this problem keenly debated.

Another question which gave rise to much discussion was the problem of workers' control in industry and the closely connected question of socialisation. In Germany this topic usually came up in connection with the functioning of works councils and joint industrial associations. In other countries, in Australia for instance, a general resolution was carried in favour of the socialisation of all industry, production, distribution, and exchange.

Industrial depression led to discussion at many conferences of the possibility of taking steps to reduce unemployment and to secure regulation of prices.

Finally, two questions relating more particularly to domestic organisation were frequently considered. These were amalgamation and workers' education. In almost all countries, the desirability of amalgamation is being maintained, and in several it has been decided to take steps for the promotion of workers' education by means of special trade union schools. Resolutions on these lines have recently been passed in the United States, Italy, and Belgium.

The extent to which these questions engaged the attention of the various conferences may be gauged from the more detailed accounts which follow.

THE INTERNATIONAL MOVEMENT

The **International Federation of Hat Makers**, including over 43,000 members, held its first post-war congress at Zürich from 6 to 9 June. The report both of the International Secretary and of the national federations had therefore to cover the whole of the war period as well as the present situation. During the war the activities of the International Federation were largely in abeyance ; but a conference, attended by the German and Scandinavian delegates, was held at Altenburg in 1920. Immediately on the cessation of hostilities, however, all the affiliated organisations wished to revive the Federation. The national reports all mentioned a very considerable increase in membership, especially since the Armistice. A large number of collective agreements have been concluded ; the 8-hour day, holidays with pay, and the limitation of overtime where there was any unemployment in the trade were among the improved conditions resulting from these agreements. The reports were also unanimous as to the extent of unemployment now prevailing, the present time being one of great depression in the hat trades; in some cases as large a proportion as 70 per cent. of the members were on short time, and 10 per cent. entirely unemployed.

A resolution was passed urging the maintenance of the 8-hour day in the face of all attacks and the limitation of overtime. Another motion called for national investigation into the frequency of mercury poisoning among hat makers, and requested the International Labour Office to undertake independent enquiries, noting especially the extent to which preventive measures have been taken, in the different countries. The congress protested against the restrictions at present in force on emigration, and reminded national federations of their duty to assist and advise intending emigrants among their members. The International Secretariat was transferred from Germany to Monza, Italy, and London was chosen as the seat of the next congress.

The executive Committee of the **International Federation of Post Office, Telegraph, and Telephone Employees** met at Prague on 28 June. Discussion took place on the position of postal workers in France and the Saar district, also on the question of the representation of workers in postal administration, a matter to which the International Labour Office was asked to give its attention. A resolution was passed in favour of affiliation to the Amsterdam International ; the next international postal workers' congress is to be held at Berlin in April 1922.

One of the oldest craft internationals, the **Fur Workers**, held its first post-war conference at Munich from 1 to

3 August. The Secretary's report, which covers the period from 1 July 1912 to the end of December 1920, gives the total income as 144,000 marks, the expenditure as 136,000, while the total balance in hand amounted to 14,000 marks at the end of the period under review. Most of the expenditure, viz. 118,000 marks, was occasioned by the publication of a trade journal.

A conference of **Christian Unions of Clothing Workers** took place on 21 June at Coblenz; it was decided to establish an International Federation of Christian Unions of Workers in the Clothing Trade.

The **All-Australia Labour Congress**, attended by representatives of the principal labour organisations of Australia and New Zealand, was held in Melbourne from 22 to 26 June. It was convened by the Australian Labour Party, and proposed to "put itself in harmony with the new psychology and the mental revolution taking place among the workers of the world". It is hoped that one result of the congress will be greater harmony between the political and industrial branches of the labour movement; resolutions adopted by the congress are to be included in the programme of the political Labour Party. Among these was a resolution, carried almost unanimously, in favour of the socialisation of all industry, production, distribution, and exchange, and another opposing state-aided immigration and claiming the right for organised labour to advise on and control immigration policy. A Council of Action of thirteen members was appointed to take supreme control of the organised labour movement.

NATIONAL MOVEMENTS

The **Trades Union Congress of Belgium** was held in Brussels from 9 to 11 July, and attended by 383 delegates representing over 700,000 members. In considering the problem of industrial depression, the congress protested against proposals to reduce unemployment relief and to abolish the regulation of prices of wheat and butter. The resolutions, passed at the close of a long discussion, recommended the Government to encourage the resumption of trade with foreign countries as a remedy for depression; to maintain control of the wheat and butter trade; to increase rather than reduce the unemployment benefit; and to find the necessary money for these objects by increasing the tax on excess profits and the succession duties, levying a tax on capital, and reducing expenditure on armaments. A resolution was also passed advocating the progressive amalgamation of the different unions and

federations, beginning with standardisation of subscriptions and benefits, and working on the lines of industrial rather than of craft organisation throughout. It was announced that the trade union school to open shortly was to study solely the question of trade union control of industry. The Executive Committee was instructed to draft a Bill for the introduction of workers' control and to conduct active propaganda among the workers in support of it.

The congress of the **Belgian Federation of Metal Workers**, held at Brussels from 12 to 14 June, was attended by 137 delegates, representing over 160,000 members. The most important question discussed was the abolition of piece-work. The congress was divided into two parties, those who wished for the entire abolition of piece-work, and those in favour of its retention, at least provisionally, under strict regulation and safeguards. It was pointed out that, the workers themselves not being united against the system, it was useless to pass sweeping resolutions for its abolition, however much it might be a weapon in the hands of some employers; nevertheless, there should be a guaranteed minimum wage for all workers, whatever the piece-rates in force. The resolution put forward by the Committee was eventually divided into two parts, the first of which was carried by 110,517 votes to 23,285, with 28,776 abstentions, the second unanimously, with the exception of the votes of two local sections. The main features of the two motions are here given.

I. The congress... considers that any system of labour based on "stimulant" merely favours the interests of the employers to the disadvantage of the workers and to the detriment of the solidarity which should prevail among them;

confirms its previous resolutions condemning the principles of piece-work or bonuses;

instructs the National Committee to undertake, as soon as circumstances permit, active propaganda against all systems of remuneration other than payment by the day or hour.

II. Considering, on the other hand, that piece-work exists in certain establishments:

the congress considers it necessary to demand severe regulation; the main requirement should be a minimum wage based on the necessities of existence.

The **Federation of Stone Workers**, meeting in congress on 19 June, also dealt with the question of piece-work. Although mainly in favour of universal time-work, it deferred to a later congress consideration of what steps should be taken in order to introduce it in practice. Another resolution defended the 8-hour day against all attempts at lengthening it, and urged its introduction where not yet in force. The position of non-manual workers in quarries and other works being found a difficulty, it was decided that an attempt should be made to organise these workers in separate groups within the Federation.

The **Federation of Bookbinders** met in congress in Brussels on 28 June, and considered the industrial crisis, which has at last begun to affect the book industry, although considerably later than other trades. The requisition of unused raw material, the institution of relief works, and the issue of unemployment relief were demanded as palliative measures. It was stated that negotiations were on foot, as a result of which the three federations in which workers in the book trade were now organised could be amalgamated in the near future.

The **Belgian Federation of Christian Trade Unions** held its congress in Brussels on 4 and 5 June, attended by delegates representing about 200,000 members. The main lines of distinctively Christian trade union policy, as emphasised at the congress, are co-operation of the classes, facilitated by the compulsory organisation of employers and employed, and the rejection of all forms of socialisation, although joint committees should have the right to inspect books, etc., in order to arrive at wage and other agreements. It should be noted, however, that the Christian Miners' Union definitely accepts the idea of the socialisation of mines.

The **French Federation of Railwaymen**, meeting in Paris from 30 May to 2 June, passed almost without discussion all resolutions relating to wages, hours, and technical organisation, and devoted its entire energies to the dispute between 'minority' and 'majority' parties. After heated discussions on the Secretary's report, the result of the voting was announced as 55,051 for, 46,500 against, the 'majority' policy and 3,600 abstentions. The validity of these figures was questioned by the 'minority', who also contested the voting rights of the representatives of the Nord-Belge system (1), who carried 5,165 votes.

The Nord-Belge representatives withdrew from the vote, without waiving their right, and the further verification of votes gave the following result: for the Secretary's report and the 'majority' policy 53,005, against 52,407, abstentions 2,715.

Similar difficulties arose over the discussion on the 'orientation' of the Federation. Two motions were laid before the Congress, by the 'minority' and 'majority' respectively. The difference in attitude may be inferred from the following extracts.

'Majority' motion:

The congress appeals to all trade union leaders and members to cease all opposition which might hamper the action of the railway

(1) Although this system lies in Belgian territory, it is the property of a French company, and by an agreement between the trade union organisations of the two countries, the workers on the Nord-Belge railway sit and vote in the French railwaymen's congresses.

workers,, all campaigns which divide the workers' organisations and weaken their resistance to the aggression of employers and to political reaction... ..The congress declares against all exclusion, recalls that the voluntary discipline of the workers is indispensable to the defence of their common interests, irrespective of individual preferences. The trade union, whose activity is only possible under conditions of complete independence, leaves complete liberty of thought to each individual, but asks in return respect for the ideas of others and obedience to decisions made in common... ..The congress... ..repeats that it remains entirely faithful to the working-class programme formulated by the General Confederation of Labour.

'Minority' motion:

Trade unionism prepares for the complete liberation of the workers, which can only be realised by the expropriation of capitalism; it recommends the general strike as a means of action, and considers that the trade union, today a defensive organisation, will be in the future the unit of production and distribution, the basis of social reorganisation...

Condemning any form of class co-operation, it does not intend to follow up the work of the joint committees, and instructs its delegates to deal with the questions in suspense... ..through trade union delegations whose work and methods will be admitted and discussed by the trade union organisation, according to the principles of the class war...

The workers of the world should unite within an organisation in which they will find the international continuation of the class war which they are carrying on against their respective employers... ..The congress declares that it cannot remain within the Amsterdam International, which shows, by its alliance with the International Labour Office of the capitalist governments, that it has turned its back on the class war and is only a caricature of the workers' International.

Faithful to the spirit of the Amiens resolution (the congress)... considers that the adhesion of the French trade union movement to the Moscow Trade Union International, far from implying a violation of the charter of Amiens, is the most sincere manifestation of its revolutionary principles.

The final vote was as follows:

'majority'	53,677
'minority'	55,140
abstentions	1,081

The Nord-Belge representatives again did not vote, although they handed in a statement to the effect that, had they done so, they would have supported the 'majority' motion.

A dilemma now arose, owing to the fact that the Federal Council, already elected by the district congresses, was predominantly 'majority'. The 'minority' representatives in the congress proposed to remedy this by reconstituting the Council on a basis of representation proportional to the voting in the congress. As a protest against this violation of the rules of the Federation, the 'majority' representatives withdrew from the congress, whereupon the remaining members proceeded to elect a Federal Council from among their own adherents. The previously elected Federal Council appointed an Executive Committee as usual, so that there are at present two bodies claiming to speak in the name of the Federation of Railwaymen. The General Confederation of Labour is conducting an

enquiry into the situation, with a view to dissolving the present deadlock.

The French **National Federation of Postal, Telegraph, and Telephone Workers** held its second congress from 15 to 18 June. It pronounced, by 150 votes to 129, with 9 abstentions, against adhesion to the Moscow International. It also discussed the question of internal re-organisation; a proposal had been put forward for the fusion of the three unions which in 1919 amalgamated to form the Federation. This was, however, rejected. The congress protested against the suggestion that the postal, telegraph, and telephone services should be transferred to private ownership, also against the proposed dissolution of all civil servants' trade unions.

The German **Miners' Federation** met at Giessen from 29 May to 5 June; in addition to 150 voting delegates there were a large number of guests, including Belgian miners and several government representatives. With only 24 dissentients, a resolution was carried rejecting the dictatorship of Moscow and reaffirming the adhesion of the Federation to the German General Federation of Trade Unions, and through it to the Amsterdam International. In future, supporters of Moscow will be excluded from any office within the Federation, if not from the Federation itself.

Questions which come up for discussion at almost all German trade union congresses are the desirability or otherwise of the joint industrial associations (*Arbeitsgemeinschaften*), the effectiveness and future value of works councils, and the value of industrial as against craft organisation of trade unions. At the Miners' congress, in spite of some opposition, a resolution in favour of the joint industrial associations was passed. It was pointed out that the works councils would be more effective if their members were better educated for the discharge of their duties. The question of industrial and craft organisation is to be put forward as an item for the agenda of the next general trade union congress. A resolution on socialisation, as desirable for the whole of industry and not for the mining industry only, was passed; the Government was called upon to redeem its promises to introduce a Socialisation Bill ⁽²⁾.

The **Central Union of Non-Manual Workers** in Germany, at its congress at Weimar, held from 29 May to 5 June, also questioned the effectiveness of works councils in the past. It was reported that several exclusions of adherents of Moscow had taken place, and it was agreed that no supporter of the Moscow programme might hold office in the union. It was

(2) In this connection it may be noted that the Miners' Branch of the Hirsch-Dunker Union of Transport Workers discussed the question of socialisation at its annual congress held at the end of June in Berlin, and passed a resolution in favour, thus coming into line with the Free (Socialist) and the Christian Unions.

also agreed that organisation on industrial lines was impossible for non-manual workers, although all unions enrolling workers in the same industry should work in harmony, and endeavour as far as possible to secure uniformity in negotiations and agreements.

The 12th congress of the **Federation of Wood Workers** in Germany was held in Hamburg from 5 June onwards. On the question of trade union 'orientation', the Federation renewed its adhesion to the Amsterdam International, and opposed the formation of Communist 'cells' within the unions. It was decided that the joint industrial associations could not as yet be dispensed with, though not necessarily desirable as an end in themselves. Industrial rather than craft unions were thought desirable, although such a policy should never be allowed to interfere with trade union unity. Manual and non-manual workers should nevertheless remain separately organised.

The **German Painters' Union** held its annual congress on 13 June at Frankfort-on-Main. A resolution supporting the Amsterdam International and rejecting all other programmes was carried by a large majority. Other resolutions demanded the socialisation of the building industry and the prohibition of the use of white lead. Special reports maintaining that only an international Convention can obviate the dangers of white lead are to be laid before the forthcoming International Labour Conference.

The **German Federation of Police Officers** met in Berlin from 26 to 29 May, and discussed various questions of policy and organisation. It was decided that in view of the nature of the police service, a strike policy was inadmissible; it was further claimed that the police should be under the central state authority and entirely independent of any political influences.

The **Federation of Bank Employees** held its first congress at Frankfort on 20 June, attended by over 2,000 members. The main questions discussed were those of a national collective agreement which should cover all bank employees, and of the spread and development of works councils in banks. It is worthy of note that both these forms of collective action have taken firm root and are enthusiastically supported in a union entirely composed of salaried employees.

The congress of the **German Textile Workers' Union**, held at Breslau from 27 June to 2 July, was attended by 520 delegates, including 47 women, representing over 500,000 members. The tactics of the Communists were condemned by a large majority. A resolution in favour of the maintenance and extension of the 46-hour week was also passed. The annual report showed a large increase in membership and funds and reported the signing of more collective agreements, as well as considerable activity and success on the part of works councils in the industry.

The **Central Union of Enginemen and Firemen** met from 27 June to 1 July at Carlsruhe. One of the principal subjects of discussion was the socialisation of electrical works, in which the majority of the members are employed. Figures were quoted to show the present preponderating influence of private capital in the electrical industry, and it was pointed out that socialisation could well begin with the sources of power, coal, lignite, and water power. Preliminary and intermediate steps were discussed, and a resolution unanimously passed in favour of socialisation and of workers' representation on the commissions appointed to carry it out.

The **Union of Christian Miners**, with 165,644 members, held its annual congress at Betzdorf on 3 July. Resolutions were passed protesting against the attempt to reduce wages, and demanding an increase, in view of the imminent rise in the cost of living. A protest was also entered against the "exploitation" of the workers by the abnormally high prices charged for the necessities of life.

The **British General Federation of Trade Unions** ⁽³⁾ held its annual congress at Bangor on 14 and 15 June. Seventy delegates, representing over a million and a half members, were present. The business transacted was mainly formal, namely, the consideration of the annual report and the election of officers. It was pointed out that industrial depression had strained the resources of the Federation, and that two weeks' benefit consumed five years' contributions. A proposal to summon an English-speaking international congress was approved. It was reported that the American and Canadian trade union federations had agreed to attend, and that replies were still awaited from Australia and New Zealand.

A committee representing the Parliamentary Committee of the Trades Union Congress and the Executive Committee of the Labour Party has drawn up a scheme for a **National Joint Council** to "consider all questions affecting the labour movement as a whole and make provision for taking immediate and united action on all questions of national emergency", and to endeavour to secure a common policy of action, "whether by legislation or otherwise", on all questions affecting the workers as producers, consumers, and citizens.

The **National Union of Railwaymen** met in congress at Newcastle from 4 to 8 July. The relations of the union with the other members of the Triple Alliance during the recent coal crisis were debated in private, but eventually the action of the Executive was endorsed by 60 votes to 20. Reference was more than once made to the difficulties caused by the fact that workers in the railway shops belong to

(3) For the composition and position of this Federation, cf. *The Growth of Trade Unionism since 1913*, *Inter. Lab. Rev.*, Vol. III, Nos. 1-2, p. 107.

different unions, which have not yet been able to reach agreement on methods of joint negotiation. As a result no settlement of disputes in the shops has yet been possible.

The decontrol and reorganisation of the railways gave rise to considerable discussion, in the course of which the Executive Committee explained their rejection of the offer of minority representation of the workers on the Boards of Directors of the new groups of railways. The resolution on the subject reads :

That this congress regrets the decision of the Government in repudiating the policy of state ownership of the railways...; reaffirms its belief that the only practical and efficient method is the national ownership and control of the entire transport system of the country; notes the new grouping system introduced; and endorses the action of our representatives in endeavouring to obtain a practical share in the management and control of the railways.

The Council of the **Italian Union of Labour** ⁽⁴⁾ met at Parma on 5 June, and decided to hold a national congress in July. One of the questions on the agenda will be the unity of the trade union movement. The Council was unanimously in favour of establishing contact with all other workers' organisations which were prepared to modify their statutes where necessary in order to effect this ⁽⁵⁾.

The **Italian Federation of Manual Workers in State Undertakings** met at Genoa from 29 May to 2 June. A Communist motion in favour of withdrawal from the Amsterdam International was defeated by a large majority. The speakers emphasised the advisability of bringing into the Federation state non-manual workers and technical workers who already approve the policy of the General Confederation of Labour. Resolutions claiming more extensive powers for works councils, although postponing the question of direct management in view of present abnormal conditions, were also passed.

The congress of the **Italian Railwaymen's Union** was held at Bologna from 3 to 9 July. This union, with a membership of about 150,000, is not attached to any national or international organisation. The main question for discussion was that of affiliation to the General Confederation of Labour. The question had previously divided the union according to the political tendencies of its members, the Socialists supporting affiliation and the Communists autonomy. At the congress, however, the Communists proposed a resolution in favour of affiliation, with a view to obtaining a majority on the Executive of the General Confederation of Labour. In order to frustrate this plan, the Socialists opposed affiliation, and eventually carried their motion. The relations

(4) Cf. *Inter. Lab. Rev.*, Vol. III, Nos. 1-2 p. 114.

(5) The Christian Unions (*Sindacati Cristiani*) have recently left the Catholic trade union federation, and, according to a statement in *Avanti*, propose to affiliate with the General Confederation of Labour, provided their religious principles are respected.

of the union to the Moscow International were also discussed. The union is to be represented at the Moscow Trade Union Congress, but will protest against the present control of the Moscow International; final decision regarding affiliation was postponed until after the Moscow conference. Resolutions were also passed in favour of workers' participation in management and control of industry and of the creation of a national transport workers' federation.

In connection with the proposed re-organisation of the General Confederation of Labour, it is interesting to note the steps being taken by non-manual workers in private establishments to reconstruct their Federation. According to resolutions adopted at a series of congresses, beginning with one held at Rome on 29 May, each industry will establish a national non-manual federation, to work in agreement with the manual workers' federation in that industry. Questions in dispute between the two federations will be submitted for final decision to the General Confederation of Labour.

The **Spanish Railwaymen's Organisation** held its fifth congress at Madrid on 14 June. A proposal for the affiliation of the organisation to the revolutionary National Confederation of Labour was rejected after long discussion, and the union remains in the General Union of Workers. A proposal for affiliation to the Moscow International was also negatived. Complaints against the constitution and working of the joint committees on hours and labour conditions were numerous, and it was decided to lay the matter before the Institute for Social Reform. The question of socialisation was discussed at considerable length, and a final resolution in favour of it was passed by 4,779 votes to 2,617.

In Sweden the **Federation of Railwaymen** and the **Federation of Locomotive Engineers and Firemen** held simultaneous conferences at Stockholm between 25 and 28 May. Both organisations decided to join the Scandinavian Railwaymen's Union, which is an amalgamation of all the railwaymen's unions in the three countries. Both, too, considered the question of affiliation to the Swedish Confederation of Trade Unions, and in both cases the matter is to be submitted to the vote of the local branches. The Locomotive Engineers also considered amalgamation with the Railwaymen's Federation, but decided instead in favour of a committee for concerted action, while maintaining independence of principle.

On 27 May the trade unions of police officers of the three Scandinavian countries met at Gothenburg, and agreed to form the Scandinavian Police Union.

The **Swiss Federation of Post Office Employees** met from 30 June to 2 July at Aarau. The question of amalgamation of the various organisations of post office and customs

employees has been under consideration for some time, and the Committee were instructed to continue negotiations for a partial, if not a general, amalgamation. This was desirable with a view to affiliation to the Postal International, as well as for national action. The adhesion of the Federation to the Swiss Federation of Trade Unions was postponed until the amalgamation question has been settled.

The **American Federation of Labor** held its forty-first annual convention from 13 to 25 June at Denver, Colorado. More than 500 delegates were present, representing a total membership of over three millions. Altogether about 140 resolutions were submitted to the convention, of which the most important only can be mentioned here.

As noted in the last number of the *Review* (⁶), the convention approved the action of the Executive Council in severing relations with the International Federation of Trade Unions. The committee appointed to report on the question stated that in their opinion

the executive of the International Federation of Trade Unions have committed the International Federation of Trade Unions to principles and policies which are accurately described by our Executive Council as revolutionary.....

that while the constitution of the International Federation of Trade Unions may seem to guarantee national autonomy... while it may even have been intended to guarantee national autonomy, there is, in fact and practice, no such guarantee.....

We note with utter amazement and resentment the action of the Bureau of the International Federation of Trade Unions in addressing official communications to the organisations affiliated to the American Federation of Labor, when all communications should be addressed to the executive officers of our national trade union centre.

Among resolutions respecting organisation, one in favour of industrial rather than craft organisation was rejected, as well as all motions supporting the 'one big union'. A declaration was passed, however, urging all unions to insert clauses in their labour agreements permitting them to render such assistance as might be needed by other unions without laying themselves open to a charge of violation of contract.

It was decided to set up a permanent educational department at the headquarters of the Federation, as well as a bureau of information.

One of the most important questions discussed was that of government ownership or control of the railways and of natural resources. After a heated discussion, the resolution finally adopted on the railway problem included the following causes:

We reaffirm our united support of legislation that will bring about the public ownership and democratic operation of the railways of the

(6) Vol. III, Nos. 1-2, p. 111.

United States, as being in strict conformity with those principles upon which our Government was instituted.....

We declare for the recognition and restoration of these fundamental principles, to the end that those who contribute their effort to the industry shall enjoy all of the rights, privileges, and immunities granted to those men who contribute capital, in proportion to the value which each contributes.

The Executive Council and the President, Mr. Gompers, were re-elected, and the meeting-place of the next convention was fixed at Cincinnati, Ohio.



CONTROL OF INDUSTRY

Joint Councils in Canadian Industry (1)

IN April 1919 a Royal Commission, known as the Royal Commission on Industrial Relations, was appointed by the Dominion Government "to consider and make suggestions for securing a permanent improvement in the relations between employers and employees" and "to recommend means for ensuring that industrial conditions affecting relations between employers and employees shall be reviewed from time to time by those concerned, with a view to improving conditions in the future". In order to secure the necessary basis for recommendations along these lines, the Commission was authorised "to obtain information as to the character and extent of organisation already existing among bodies of employers and employees respectively", and to "investigate available data as to the progress made by established joint industrial councils in Canada, Great Britain, and the United States". The Commission on Industrial Relations, itself a body representing the public, employers, and employed, held sessions in all the large industrial centres from the Pacific to the Atlantic and considered the proposals and views of any persons or associations who cared to appear before it. In the Report submitted by the Commission it was stated "There is urgent necessity for greater co-operation between employer and employed. The great obstacle to such co-operation is the suspicion and distrust with which in many cases each regards the other". A recommendation was made in favour of establishing joint industrial councils and works committees; the Commission also advised "that the Government should interest itself in the development of these councils, and that a Bureau should be established under the Minister of Labour, which would compile all available statistics on this subject, undertake publication of developments in this and other countries, maintain officers who would be available to give assistance and act as liaison officers between employer and workers where desire is expressed to create such councils, and render such other assistance as may be required". The Report states, however, that the Commissioners "are under no illusions as to industrial councils constituting a

(1) See *Bulletin No. 1. Industrial Relations Series*, Department of Labour, Canada, Feb. 1920.

universal panacea for all industrial troubles. Their usefulness will depend upon the spirit in which they are adopted ”.

In accordance with a recommendation of the Royal Commission on Industrial Relations, a National Industrial Conference was held at Ottawa in September 1919 of representatives of employers and employees and of the public; the subject of joint industrial councils and works committees was discussed, a resolution being unanimously adopted approving the formation of joint industrial councils as a means of furthering greater co-operation between employer and employees.

EXISTING SCHEMES

Schemes which have been put into effect in Canada, with the object of giving some voice in management to employees, include many modifications and variations. Nevertheless, the principles involved differ but slightly, and the objects of the different joint industrial councils and committees reported to the Department of Labour are, generally speaking, the following: (1) to provide means whereby, on the one hand, employees may crystallise their thoughts and present their views to the management about wages and working conditions, and, on the other hand, to provide the management with a means whereby they may become better acquainted with the preferences, and appreciate the points of view, of the workers; (2) to provide means for an exchange of ideas and suggestions and to develop further a spirit of co-operation; in short, to secure the largest possible measure of joint action between employer and employee in any matters affecting their common welfare. Among the industries and branches of employment in Canada in which joint councils or committees have already been introduced are the following:—

- Abattoirs
- Agricultural implements
- Automobiles
- Bridge and structural iron
- Brush manufacturing
- Building and construction
- Civil Service of Saskatchewan
- Clothing
- Engineering
- Oil
- Packing
- Railways
- Rubber
- Telephones
- Woollen goods

Some committees are charged with the administration of trust funds and sickness benefits; others, again, deal with questions of policy relating to wages, hours, employment, working conditions, work practice, safety, sanitation and

health. The number of employees coming within the scope of joint councils and committees in July 1920 is reported as approximately 145,000.

The basis of employee representation on joint committees in Canada varies between one representative for each ten workers and one representative for each hundred workers; the average seems to be about one representative for each thirty workers. In most cases the employee representatives are nominated and elected by secret ballot, and in practically all cases an equal number of representatives of the management are appointed by the management. In some cases, provision is made for a chairman appointed by the management; in others the chairman is appointed by the full board. Similarly the secretary is sometimes appointed by the management, and in other cases two secretaries are appointed, one by the management and one by the employees. A plan which appears to be distinctly approved is to have the director of personnel, the welfare supervisor, or the employment manager act as secretary of the committee. In some works where women are employed, provision is made for a special representative elected by the women only; but in most cases the representatives are elected by various groups, such groups being arranged either for geographical convenience, or by crafts within the works. One large company has a permanent secretary paid by the employer.

The constitutions usually contain a clause providing that the scheme for employees' representation shall in no way abridge or conflict with the right of employees to membership in any labour or other lawful organisation.

In most cases, employees must show one year or more of continuous service with the company and be at least twenty-one years of age to become eligible for election as an employees' representative. An exception is made in the case of women representatives, for whom in certain cases the minimum age is eighteen years. As a rule, no foreman nor any person having definite authority to hire or discharge is allowed to represent the employees. Most regulations specify that it is necessary for an employee representative to be a Canadian citizen or of British birth, but in one case an employee is eligible if he has his first papers, and in another United States citizens are eligible. Meetings of the councils or committees are as a rule held once a month, but provision is generally made for special meetings to be called when necessary. In some cases the council meetings are held during the employer's time, but there are cases where meetings are after working hours. As a rule, meetings are held on the company's premises. In some cases, the constitution of the joint industrial council provides for standing committees to deal with such matters as health, safety, sanitation, recreation, libraries, athletics, restaurants, ambulances, and entertainments, but in the majority of cases sub-committees are formed to deal with these and other

specific matters, disbanding when their report is made to the council.

The constitutions of several joint industrial councils provide that matters which cannot be adjusted between individual employees and their foremen may be submitted to a shop committee, and, failing a mutually satisfactory arrangement, may be referred to a general council, and thereafter in the absence of a suitable agreement, to arbitration, the decision of the arbitrators to be binding. In some cases, however, no procedure as to arbitration has been thought necessary, the decision of the "chief executive" officer being final. In practically all cases, provision is made for fullest investigation, and from the information to hand, it would appear that it is very seldom that matters cannot be satisfactorily handled by the shop or works committees or councils.

As a rule, minutes of the council and committee meetings are kept and means provided for publishing them, in order to inform employees as to matters under discussion and as to decisions made. In some cases the minutes are published in the works newspaper. In other cases, the minutes are kept in the office of the secretary, available for inspection at any time.

The subjects dealt with by the joint committees include absenteeism, ambulance work, apprentice regulations, athletics, benefits, bonuses, buildings, canteens, church work, comfort, co-operative stores, education, employment, equipment, gardens, group insurance, health, holidays, hours, materials, methods, organisation, piece-rates, production, recreation, rules, safety, salvage, sanitation, thrift, Victory Bonds, wages, working conditions, and many other matters.

WORK OF THE JOINT COUNCILS

The work of the joint committees or councils in industry has been commented on very favourably by employers, as is shown in reports from some of the larger firms in Canada, which have put into operation extensive plans for industrial organisation with employee representation. *The Bell Telephone Co. of Canada Ltd.* report improvements in service rendered, due to keener interest shown by employees in work and closer co-operation with company officials. The setting up of works councils throughout this company and the joint meetings between the representatives of employees with the management are said to have been greatly beneficial to both parties. One of the largest rubber manufacturers, operating several factories, states that the general impression among managers is that headway has been made in quantity and quality of output and that labour relations in general between management and employees have noticeably benefited; employees have been much more willing to co-

operate and be fair in the settlement of all questions. The *Gray-Dort Motors Ltd.* state that results of the councils have been surprisingly good. The *Gutta Percha and Rubber Co. Ltd.* state that a favourable influence has been exercised on the problem of labour turnover, and distinctly feel that the relations between management and employees have improved as a result of the council meetings; the chairman of the employees' committee of the works council states that the joint council has established harmony in all relations between the management and the working force of the company. *Imperial Oil Ltd.* state that a spirit of mutual respect and a greater readiness to appeal to a sense of fair play are being shown. The *International Harvester Company of Canada Ltd.* state that labour relations in general are unquestionably better. The *Kerr Lake Mining Company Ltd.* are thoroughly convinced that joint discussions are of material benefit not only to the men but also to the company. The *Manitoba Bridge and Iron Works Ltd.* state that their labour turnover has been reduced 50 per cent. since a council was started, though they do not claim that this has entirely been the result of the institution of the council. The *Massey Harris Co. Ltd.* state that the councils have more than justified themselves, and representative employees express the opinion that "works councils remove all grounds for dissatisfaction, suspicion, and discontent". The *Robb Engineering Works Ltd.* look upon the committee arrangement as having proved very satisfactory from all points of view. The *Spanish River Pulp and Paper Mills Ltd.*, who have made a very close study of joint committees, are of opinion that committees would be good for the employees as well as for the company.

SPECIAL COUNCILS AND BOARDS

In the spring of 1920 there was organised the Saskatchewan Civil Service Joint Council. The Council, representing the Government and Civil Service employees, is composed of three Deputy Ministers and three members of the Saskatchewan Civil Service Association. The Council may appoint such committees as may from time to time be deemed advisable and may call officials or employees before it to give information regarding any matter under consideration. Recommendations of the Council are referred to the deputy Head of the Department concerned and to the Civil Service Commissioner. Matters dealt with include complaints as to salaries, allocation of work, holidays, sick leave, the operation of the staff dining-room, and similar matters.

In the month of August 1918 a Joint Board, known as the Canadian Railway Board of Adjustment No. 1, was formed by agreement between the railways of Canada and six of the

railway employees' Brotherhoods, "to avoid disputes or misunderstandings which would tend to lessen the efficiency of transportation service in Canada during the war". It was further agreed that this arrangement should continue in effect after the war, unless either of the parties desired to terminate it. The operations of the Board during the war proved to be so effective that the arrangement was continued by mutual agreement and is still in effect (Feb. 1921). The Board consists of twelve members, half selected by the railways and half by the executive officers of the railway Brotherhoods concerned, namely, Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen and Enginemen, Order of Railway Conductors, Brotherhood of Railroad Trainmen, Order of Railroad Telegraphers, and International Brotherhood of Maintenance of Way Employees. All office expenses in connection with the Board of Adjustment are borne equally by the Railway Association and the employees' organisations. The Board meets regularly at stated times each month, and continues in session until all matters before it are considered. Personal grievances or controversies on Canadian railways, arising out of interpretations of wage agreements, are handled by a general committee of employees up to and including the chief operating officer of the railway concerned. If an agreement is not reached, the chairman of the general committee of employees may refer the matter to the executive officer of the organisation concerned, and if the contention of the employees' committee is approved, the matter is referred to the Canadian Railway Board of Adjustment No. 1, whose decision is binding. All decisions of the Board must be approved by majority vote of all members of the Board. So far it is understood that decisions of the Board have in all cases been unanimous⁽²⁾.

A joint body, known as the National Joint Conference Board of the Building and Construction Industries of Canada, was organised in 1920 to furnish a common meeting ground for the discussion of questions affecting employers and employees in the building and construction industries. It is composed of five representatives selected by the Association of Canadian Building and Construction Industries, and five members selected by the representatives of the international trade unions in the building trades. In connection with this national Board, there are local boards which deal with disputes and agreements in the building and construction industries; such boards or councils are already functioning at Ottawa, Toronto, London, and Hamilton, and their operations have accomplished much in harmonising and standardising conditions

(2) Results of each of the 87 cases dealt with by the Joint Board between 7 August 1918 and 31 August 1920 are tabulated in the *Report of the Proceedings of the Canadian Railway Board of Adjustment No. 1*, published by the Canadian Department of Labour, in the *Labour Gazette*, November 1920.

of contracting and of employment, and have secured a large measure of joint action between employers and employees for developing the building industries as part of a national system and for improving the conditions of all the workers engaged in it. The Ottawa Local Joint Board consists of ten members, with power to add to their number, five being representatives of the Building Trades Council of Ottawa, and five being from the Ottawa Branch of the Association of Canadian Building and Construction Industries. The Toronto Local Joint Board consists of ten members with power to add to their number, two representatives being from the Builders' Exchange, one from the Ontario Association of Electrical Contractors and Dealers, one from the Toronto Society of Domestic, Sanitary, and Heating Engineers, one from the International Master Painters' Association, and five from the Building Trades League. The London Local Joint Board is similar in constitution to those of Ottawa and Toronto. The Hamilton Local Joint Board consists of ten members, five appointed by, and representing, the employers engaged in the building industry, and five appointed by the Building Trades Council and representing the employees.

Meetings of the local boards are held as often as necessary, regular meetings being held once a month. The agenda has included grievances of employees unions and of employers, apprenticeship systems, legal disputes, interpretation of agreements, etc.; the work of the boards has proved very valuable both to employers and employees; it has averted many strikes and has everywhere had a good effect on the general relations between building employers and their employees.

A system of joint action has also been developed in the men's clothing industry in Canada, based on that in operation in the firm of Hart, Schaffner and Marx, Chicago. In America a similar development has taken place in the clothing markets of Rochester, Baltimore, Boston, and New York. The Amalgamated Clothing Workers of America have workers' boards in the Canadian cities of Montreal, Toronto, and Hamilton. These boards are purely employees' organisations and do not represent the employers. Each board has a manager, who acts with the labour manager of the associated clothing manufacturers in the adjustment of disputes. The Labour Adjustment Council, constituted of representatives of employers and employees, considers all matters on which the business manager of the union and the general manager fail to agree. If the members of the council do not reach an agreement, the "impartial chairman" makes a recommendation which is binding on both sides. In Toronto there is an agreement made by the union with the manufacturers.

In the Province of Manitoba the Industrial Conditions Act of 1919 provided for a "Joint Council of Industry" to consist

of five persons, two to be selected as representatives of employers, and two to be selected as representatives of employees, the chairman to be an impartial person so far as employers and employees are concerned. Members of the Council hold office during the pleasure of the Lieutenant-Governor in Council. The Lieutenant-Governor in Council may, upon the recommendation of the Joint Council, appoint persons with technical or special knowledge as expert advisers. The Council's jurisdiction covers firms and corporations where the relations involved are those of employer and employee; it has no jurisdiction in agriculture or over the railways operated under the Railway Act of Canada. The Council may take the initiative in enquiring into alleged unfair profits arising out of the maintenance of wages-rates which are not fair or reasonable, and may from time to time enquire into the cost of living, into the numbers of persons employed in industry, into rates of wages, and other similar matters. Action may be taken upon complaint of any person or organisation, or whenever the Council has reason to believe that an industrial dispute exists or seems likely to arise. Between May 1920, when the Council was first constituted, and 21 January 1921 sixty-nine meetings of the Council were held and eighty interviews granted to disputants. The findings of the Council were announced in thirteen cases of industrial disputes; in five cases both parties previously agreed to abide by the decision of the Council before it was given out; in one case some of the recommendations were not adopted; in another case the finding was rejected by the labour union which had referred the matter to the Council; and in all other cases agreements were entered into which are said to be satisfactory to both parties, and embody the Council's suggestions. The Council has also conducted investigations into the question of rents, housing, unemployment, apprenticeship and industrial education, cost of living, and profit-sharing systems.

PRODUCTION, PRICES, AND COST OF LIVING

Retail Price Fluctuations

In this article, as in those which have already appeared⁽¹⁾, a résumé is given of the most important information which it has been possible to collect regarding fluctuations in the cost of living and in retail prices of foodstuffs. Table I gives index numbers of the retail prices of food, table II index numbers of the cost of living, including, as a general rule, food, clothing, heating, lighting, housing, and miscellaneous items. Capital letters (A, B, C, etc.) at the top of each column refer to notes which show which of these groups are included in the figures for each country. The tables are the same as those appearing in previous numbers of the *Review*, but have been completed and brought up to date. As before, in order to simplify reference and comparison, the index numbers have been reduced to a common base : July 1914 = 100.

The majority of the index numbers included in the two tables have been drawn from official sources, only those for Switzerland being taken from a private source, the co-operative societies. A complete list of sources is given at the end of the article.

Following the method adopted in the previous article, the absolute maximum of each index number is given in heavy type in all the tables. If, therefore, the maximum month is not included in any table, no heavy type figures will appear⁽²⁾.

(1) *Inter. Lab. Rev., Retail Price Fluctuations, etc.*; Vol. I, No. 1, p. 91 No. 2, p. 53 ; Vol. II, No. 1, p. 32 ; Vol. III, Nos. 1-2, p. 116.

(2) In the article in the April number of the *Review* heavy type was used to mark maxima within the period covered by the table.

TABLE I. INDEX NUMBERS OF RETAIL PRICES OF FOOD IN VARIOUS COUNTRIES
(Base : July 1914 = 100)

	Aus- tralia (a)	Austria	Belgium (c)	Canada (e)	Den- mark (f)	Finland	France (h)	Ger- many (i)	India	Italy	Nether- lands (j)	New Zealand (c)	Norway (k)	South Africa (a)	Spain (l)	Sweden (d)(m)	Switzer- land (d)(k)	United Kingdom (d)	U. S. A. (c)		
No. of towns or localities	30	Vien- na	1,028 bud- gets	60	100	20	Paris	320	200	Cal- cutta	Rome	Milan	Ams- ter- dam	25	30	9	Chief towns	40	23 (n)	630	51
No. of items	46	12	22	29	—	37	13 (g)	13 (g)	15	46	36	38	27	59	—	18	12	50	37	20	43 (o)
Base period	1911	July 1914	Apr. 1914	July 1914	July 1914	July 1914	1910	1910	1910	July 1914	1st half 1914	1st half 1914	1913	1909- 1913	July 1914	1910	Apr. 1909 Mar. 1914	July 1914	June 1914	July 1914	1913
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1914 July	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1915 "	131	181	"	105	128	"	120	123	155	108	95	"	114	112	123	107	107	"	119	132	98
1916 "	130	386	"	114	146	"	129	142	210	110	111	"	117	119	153	116	113	152	141	161	109
1917 "	126	622	"	157	166	"	183	184	221	116	137	"	146	127	203	128	127	180	179	204	143
1918 "	131	1788	"	175	187	"	206	244	249	121	203	325	175	129	271	134	151	258	222	210	164
1919 "	147	3037	"	186	212	"	261	289	433	155	206	310	196	144	290	139	168	318	250	209	186
1920 Jan.	160	4620	381	206	251	898	290	"	520	153	275	412	197	158	299	177	180	"	238	235	197
" Feb.	162	—	400	212	"	909	297	"	588	154	299	418	199	160	297	187	"	"	231	233	196
" Mar.	163	—	450	215	"	915	339	319	667	151	300	406	199	162	298	183	"	287	234	235	196
" Apr.	173	5454	458	215	"	920	358	"	756	151	310	423	200	162	305	183	"	"	231	246	207
" May	177	—	444	224	"	914	378	"	894	159	325	445	202	163	311	188	"	"	228	255	211
" June	187	—	451	228	"	926	369	379	924	164	315	458	204	163	311	194	"	287	235	258	215
" July	194	5570	454	227	253	982	373	"	1005	170	318	445	210	167	319	197	189	"	239	262	215
" Aug.	194	5777	492	221	"	1089	373	"	1041	167	222	454	212	171	333	196	"	"	229	267	203
" Sept.	197	6206	500	215	"	1134	407	388	1091	166	324	468	247	173	336	195	"	298	248	270	199
" Oct.	192	6184	517	213	"	1172	420	"	1323	165	341	480	219	177	340	197	"	"	246	291	194
" Nov.	186	7131	505	206	"	1206	426	"	1421	161	361	515	214	176	342	196	"	"	236	282	189
" Dec.	184	8918	506	200	"	1233	424	450	1472	—	375	535	202	179	342	198	"	286	230	278	175
1921 Jan.	—	—	493	190	276	1174	410	"	1520	—	367	573	193	178	334	172	—	"	224	263	169
" Feb.	184	—	484	178	"	1107	382	"	1431	—	376	564	193	175	308	165	—	"	221	249	155
" Mar.	181	—	436	172	"	1137	358	429	1418	—	386	582	193	169	299	160	—	247	218	238	154
" Apr.	—	—	418	165	"	1107	328	"	1398	—	432	598	187	169	300	156	—	"	211	232	149
" May	—	—	405	150	"	—	317	"	—	—	421	598	183	168	292	—	—	"	—	215	142
" June	—	—	—	—	"	—	312	363	—	—	—	—	—	166	—	—	—	—	—	—	141

(a) Monthly figures relate to average of month.

(b) Monthly figures relate to end of month.

(c) Monthly figures relate to the 15th of the month.

(d) Monthly figures relate to the 1st of the following month.

(e) Until December 1920 figures relate to 15th of month; after January 1921 to the 1st of the following month.

(f) Average of selected weeks in the half-year.

(g) 11 foodstuffs, together with paraffin and methylated spirit.

(h) Quarterly index. From 1914 to 1919, index for the third quarter of each year.

(i) From 1915 to 1919 figures relate to November.

(j) From 1914 to 1919 figures relate to average for year.

(k) From 1914 to 1919 figures relate to June.

(l) Half-yearly figures give the average for the periods April-September and October-March.

(m) For 1916 index relates to December, for 1917 to September.

(n) Index of the Federation of Co-operative Societies; from 1914 to 1919 figures relate to the whole country.

(o) Until December 1920, 22 items.

* No figures published.

TABLE II. INDEX NUMBERS OF THE COST OF LIVING IN VARIOUS COUNTRIES
(Base: July 1914 = 100)

Countries	Australia (e)	Belgium (c) (f)	Canada (g)	Denmark	Finland	France (h)	Germany		Italy	New Zealand (k)	Norway (k)	Sweden (l) (d)	Switzerland (d) (k)	United Kingdom (d)	U. S. A.
No. of towns or localities	30	59	60	100	20	Paris	47 (i)	Berlin (j)	Rome	25	30	40	23 (n)	630	32
Groups of items (see notes)	A. E.	A. B. C. D. G.	A. C. D. E. G.	A. B. C. D. E. F. I.	A. B. C. E. J. K.	A. B. C. D. E. F.	A. C. D. E.	A. B. C. D. E. F.	A. B. C. D. E. F.	A. C. D. E.	A. B. C. D. E. F. I.	A. B. C. D. E. F. I.	A. C. D.	A. B. C. D. E. F.	A. B. C. D. E. F. G. H.
Base period	1911	Apr. 1914	July 1914	July 1914	July 1914	1st half 1914	1913 -1914	1913 -1914	1st half 1914	1909 -1913	July 1914	July 1914	June 1912	July 1914	1913
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1914 July	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1915 "	119	"	97	116	"	"	"	"	99	107	117	119	119	125	102
1916 "	115	"	102	136	"	"	"	"	116	113	146	139	140	148	109
1917 "	116	"	130	155	"	"	"	"	146	119	190	166	180	180	128
1918 "	118	"	146	182	"	"	"	"	197	128	253	219	229	203	156
1919 "	132	"	155	211	"	238	"	"	205	133	275	257	261	208	175
1920 Jan.	"	396	170	242	819	"	"	764	263	139	"	"	245	230	"
" Feb.	"	420	174	"	832	"	623	882	293	141	"	"	238	230	"
" Mar.	143	445	176	"	840	295	741	1118	296	143	288	265	243	232	"
" Apr.	"	461	179	"	850	"	836	1302	306	144	"	"	240	241	"
" May	"	471	187	"	854	"	876	1267	318	146	"	"	239	250	"
" June.	154	462	189	"	868	311	842	1056	311	147	302	270	245	252	214
" July	"	453	190	262	911	"	842	1125	313	149	"	"	253	255	"
" Aug.	"	463	188	"	991	"	795	1069	316	150	"	"	253	261	"
" Sept.	165	471	186	"	1030	363	777	1038	325	152	335	281	262	264	"
" Oct.	"	477	187	"	1063	"	827	1104	348	154	"	"	258	276	"
" Nov.	"	476	185	"	1085	"	872	1097	369	155	"	"	249	269	"
" Dec.	162	468	181	"	1103	370	916	1146	378	157	335	271	243	265	198
1921 Jan.	"	450	175	264	1065	"	924	1122	374	159	"	"	237	251	"
" Feb.	"	434	168	"	1013	"	901	1090	379	160	"	"	234	241	"
" Mar.	160	411	165	"	1027	338	901	1035	384	160	301	249	231	233	"
" Apr.	"	399	161	"	1008	"	894	976	411	"	"	"	212	228	"
" May	"	389	"	"	"	"	880	930	396	"	"	"	"	29	"
" June	—	—	—	"	—	—	896	1080	—	—	—	236	—	—	—

Groups of items included in the budget:

A. Food B. Clothing C. Fuel D. Light E. Rent F. Miscellaneous
G. Household utensils H. Furnishing I. Taxes J. Newspapers K. Tobacco

(a) Monthly figures relate to average of month.

(b) Monthly figures relate to end of month.

(c) Monthly figures relate to the 15th of the month.

(d) Monthly figures relate to the 1st of the following month.

(e) Figures relate to quarterly average.

(f) The index is a simple arithmetic average.

(g) Until December 1920 figures relate to the 15th of the month; after January 1921 to the 1st of the following month.

(h) For 1914 and 1919, figures relate to first half of year.

(i) Official index; until January 1921 only 39 towns.

(j) Kuczynski's index-numbers: cost of minimum of subsistence.

(k) Monthly figures relate to average of six months preceding month under consideration.

(l) From 1914 to 1919, figures relate to June in each year.

(m) For 1916, the December figure; for 1917, the September figure.

(n) Index of the Union of Co-operative Societies. From 1914 to 1920 figures relate to whole country.

Index numbers are generally based on averages which give the different quantities of each article consumed in a given period by what is called a normal working-class family. This normal family consists as a rule of five persons, the father, mother, and three children, whose supposed age varies in different countries. Kuczynski's index number for Berlin and the index numbers for Paris and Sweden are, however, based on a budget for four persons; in the United States the number of persons included in a 'normal' family is variable. The quantities allowed for in the typical budget are fixed according to observations made on a certain number of working-class families, or else according to theoretical calculations based, as regards foodstuffs in particular, on the number of calories which are necessary to support life. The prices recorded at various periods are then weighted according to these different quantities, on the assumption that the typical amounts consumed by the normal family have not changed since the beginning of the war. The total expenditure thus obtained is then converted into an index number.

It is clear these figures do not measure exactly the cost of living. In the first place, they cannot include the whole expenditure of a family, and, in the second place, the family budgets on which they are based have been considerably modified in the course of the war, owing both to Government restrictions and to changes in the cost of living itself. Index numbers calculated in accordance with post-war conditions of living show that the figures based on normal budgets assume too high an average consumption.

The following notes on the different countries give, as far as possible, index numbers of the different groups of articles and of the general cost of living for the last six months and for the month of the preceding year which corresponds to the latest date for which figures are available ⁽³⁾.

Certain countries have confined their investigations into the cost of living to an examination of the prices of food alone; these are included in the present survey as giving some indication of the movements of prices. It must nevertheless be emphasised that these two series of figures — index numbers of cost of living and of food prices — have anything but the same value or importance.

GENERAL SURVEY

Great caution must be exercised in comparing index numbers between different countries. The methods of

(3) In the case of Denmark and Spain, no information has been received beyond that published in the last number of the *Review*. In consequence, no special notes on these two countries have been included.

calculation, the number and importance of the markets observed, the number and nature of the commodities included, and the base periods vary from one country to another. These differences, therefore, make comparisons of the results almost impossible. Detailed comparisons between the general cost of living index numbers of different countries must especially be avoided, as the composition of these numbers is extremely varied.

It can, however, be said that there has been in recent months a general fall in the cost of living index numbers of almost all the countries for which figures are available, with the exception of Austria, Italy, and Poland, where they continue to rise, and New Zealand, where the index numbers are practically stationary.

It may also be noted that in the majority of cases this fall in the cost of living, which was at first due solely to the decrease in the cost of clothing and food, was also caused, during the first few months of 1921, by the fall which then began in fuel and lighting. The cost of housing continues to rise, however, in all the countries for which figures are available. Variations in rent must be considered in a separate category; as a rule they occur later than in other commodities, and in most countries rents have been artificially prevented from rising by special legislation during the war or post-war period. As a result they are still rising slightly, although their total increase over the 1914 level is much less than that of any other article.

AUSTRALIA

The index number of foodstuffs issued by the Commonwealth Bureau of Census and Statistics continues to fall (see table I). In March, the latest date for which figures are available, it showed a fall of 8 per cent. from the maximum reached in the autumn of 1920.

Rents, on the other hand, remained almost stationary, though with a slight tendency to rise, so that the index of food and rent combined (see table II) is practically fixed at 60 per cent. above the pre-war level.

AUSTRIA

No further figures regarding the general cost of living in Vienna have been received since the index number published in the last number of the *Review*. The following table gives the index numbers of prices at Vienna of food alone, including the fuel necessary for its preparation.

TABLE III
(Base: January 1921 = 100)

Jan. 1921	100
Feb.	114
Mar.	123
Apr.	119
May	126

Prices are thus still rising.

BELGIUM

The index numbers of retail prices issued by the Ministry of Industry, Labour, and Food still show a rise (see tables I and II). The first of these figures is weighted, but only includes food. The average for different types of households fell from 418 in April to 405 in May, a decrease of 13 points. The other index number refers to food, clothing, heating and lighting, and household articles; rent is not included. But only a simple arithmetic average is given, either for the total of 56 commodities or for the separate groups, which are classified on a different principle from that adopted in most other countries. The general index stood at 389 in May, as against 399 in the preceding month.

CANADA

The general cost of living index number published by the Department of Labour of Canada continues to fall. The decrease is more noticeable in food than in heating and lighting. Clothing is not included.

TABLE IV
(Base : July 1914 = 100)

	1920		1921				
	15 May	15 Dec.	1 Jan.	1 Feb.	1 Mar.	1 Apr.	1 May
Food	224	200	195	190	178	172	165
Heating & lighting	183	220	221	218	211	208	202
Housing	130	137	137	137	137	138	139
General average	187	181	179	175	168	165	161

CHILI

The Labour Office at Santiago has sent information with regard to retail prices at Santiago of a large number

of foodstuffs. The average for 1920 and the prices for the early months of 1921 are given. These average prices are shown below in pesos for the principal articles (1 peso = 8 ½d. at par). In addition, index numbers have been calculated for the various months by taking the arithmetic mean of the prices of the articles, choosing as a base the average price for the year 1920.

TABLE V

	1920	1921				
	Average	Jan.	Feb.	Mar.	Apr.	May
	pesos	pesos	pesos	pesos	pesos	pesos
Rice	2.04	1.41	1.32	1.38	1.54	1.53
Sugar	2.86	2.20	2.14	2.03	2.25	2.08
Coffee	4.73	3.57	2.78	3.37	4.54	3.35
Meat, 1st & 2nd qualities	2.05	2.32	2.11	2.03	2.46	2.21
Flour	0.99	0.88	0.73	0.75	0.76	0.73
Maize	0.39	0.39	0.43	0.42	0.35	0.35
Bread	1.05	0.93	0.85	0.98	0.87	0.93
Potatoes	0.24	0.16	0.15	0.16	0.20	0.44
Peas	0.59	0.40	0.37	0.34	0.40	0.55
Corn	0.63	0.61	0.55	0.57	0.53	0.17
Index I numbers (base : 1920=100)	100	83	73	77	89	79

There are considerable fluctuations in the prices of the various articles, as well as in the average index numbers, so that it is hardly possible to deduce any general tendency from them. It may, however, be stated that most prices in May 1921 are below the 1920 average, but, taking into account the very slender basis of the investigation, no general conclusion can be drawn from it.

CZECHO-SLOVAKIA

No complete and systematic investigation into the cost of living has yet been made in Czecho-Slovakia. It is true that the Statistical Office has recently published a series of budgets of working and middle class families, but they give no indication of the changes in the cost of living. The only information available on this subject is that provided by the index numbers of retail prices ⁽⁴⁾. These index numbers are given below for two groups of articles. The arithmetic mean has been taken of the index numbers of all the articles included in the group. The figures refer to the whole country.

(4) *Inter. Lab. Rev.*, Vol. III, Nos. 1-2, p. 122.

TABLE VI
(Base : July 1914=100)

		1921				
		Jan.	Feb.	Mar.	Apr.	May
I. Foodstuffs	(21 items)	1,643	1,494	1,423	1,450	1,456
Fuel	(4 ")					
Oil and soap	(4 ")					
II. Cloth and clothing	(9 ")	2,878	2,803	2,566	2,347	2,137
Boots and shoes	(4 ")					
Hats	(2 ")					

The Czecho-Slovak Statistical Office considers that the index numbers in group I may be taken as a basis in order to get an approximate idea of the variations in the cost of living. The articles contained in it do, in fact, form the greater part of a working-class budget and are bought in the largest quantities. On the other hand, the very great rise in price in clothing and footwear would be counterbalanced, in a complete budget, by the very slight rise in rent.

The index numbers of group I are based on more reliable information than those in group II. It would appear, therefore, that there was some fall in prices during the early months of 1921. We give these figures, however, with some reserve, for it must not be forgotten that the index numbers of these two groups are not weighted according to the consumer's budget.

FINLAND

No marked change has taken place during March and April 1921 in the general cost of living index number as published by the Ministry of Social Welfare. It fluctuates at slightly above 1,000—that is to say, at ten times its pre-war level. The same holds good for the group of foodstuffs, which are now slightly above 1,100. Some tendency towards a fall is, however, shown by clothing and tobacco, while rent is still tending to rise.

TABLE VII
(Base : July 1914=100)

	1920			1921			
	Apr.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Foodstuffs	920	1,206	1,233	1,174	1,107	1,137	1,107
Clothing	979	1,133	1,126	1,089	1,059	1,031	1,022
Rent	309	382	389	407	414	418	419
Heating	1,085	1,443	1,443	1,414	1,292	1,266	1,291
Tobacco	1,320	1,376	1,384	1,394	1,388	1,362	1,322
Newspapers	401	401	401	818	818	818	818
General average	850	1,085	1,103	1,065	1,013	1,027	1,008

FRANCE

Index numbers have already been given of the District Committee of Enquiry into the cost of living in Paris ⁽⁵⁾. The work of the other district committees has not yet made much progress. However, a certain number of joint official and unofficial committees have collected data with regard to certain towns, but these data are hardly comparable, owing to differences in the methods and bases used.

We give below, as a specimen, with all due reserve, the figures published by the joint committee for the clothing industry at Lyons. These figures were used as a basis for wage adjustments in the industry. They represent expenditure in francs for a typical working-class family.

TABLE VIII

	1920			1921
	24 Mar.	24 July	8 Oct.	24 Mar.
	<i>francs</i>	<i>francs</i>	<i>francs</i>	<i>francs</i>
Foodstuffs	5,515.30	5,519.60	6,200.30	5,336.60
Clothing	2,366.00	2,366.00	2,439.00	1,624.50
Heating and lighting	472.80	526.60	559.80	406.80
Other household expenses	768.60	768.60	901.60	714.00
Miscellaneous	967.70	1,015.95	1,045.95	1,135.95
Total	10,190.40	10,196.95	11,146.65	9,217.85

Prices have, therefore, been falling since the beginning of 1921. The greatest reduction has been in clothing. No figure is given for rent.

With regard to the variation in retail prices of thirteen commodities (foodstuffs, oil, and methylated spirit) in Paris and for France as a whole, as published by the *Statistique Générale de France*, prices are reported to be still falling (see table I).

GERMANY

The cost of living index numbers of the *Statistisches Reichsamt* had been falling since the beginning of 1921, but in June rose again a few points and nearly reached the April level. This rise is due principally to the increase in price of a certain number of foodstuffs (eggs, vegetables, potatoes, fish, milk, sugar), as well as of lighting (gas and electricity).

(5) *Inter. Lab. Rev.*, Vol. II, No. 1, p. 45; Vol. III, Nos. 1-2, p. 123.

However, the movement is not general for the whole country. Some towns show a reduction in the general index number for the same date. The following table shows this variation for the most important towns.

TABLE IX
(Base : 1913-1914 = 100)

	1921					
	Jan.	Feb.	Mar.	Apr.	May	June
Berlin	926	884	881	866	844	849
Hamburg	923	852	890	867	820	814
Munich	866	854	843	829	855	—
Dresden	922	894	878	882	890	899
Breslau	895	834	838	824	805	872
Essen	969	915	910	877	865	849
Frankfort	973	960	918	974	909	938
All Germany (47 towns)	924	901	901	894	880	896

HUNGARY

In the April number of the Review ⁽⁶⁾ index numbers of the cost of living were given as published by the Journal of the Confederation of Magyar Trade Unions (*Szakszervezeti Ertesito*). The figures for May are given below.

TABLE X
(Base : July 1914 = 100)

	1920	1921	
	31 May	31 Jan.	31 May
Foodstuffs	4,840	5,739	4,078
Clothing	5,783	9,720	4,937
Heating and lighting	2,825	5,308	4,645
Rent	129	167	198
Other household expenses	5,044	7,389	6,111
Miscellaneous	1,592	2,177	7,199
General average	3,424	4,745	3,623

As has already been said, the rise in prices in Hungary has been very great. A perceptible reduction, however, took place in nearly every group in the early months of 1921, and the general index number has nearly returned to the level of a year ago. Rent is still rising, but to an extent which is almost insignificant in comparison with the other groups.

On the contrary, the "miscellaneous" group shows an extraordinary rise. It is explained by the very great increase in

(6) *Inter. Lab. Rev.*, Vol. II, No. 1, p. 41.

prices of tobacco and of hairdressers, but more obviously by the addition of taxes which did not exist before and which double miscellaneous expenses.

INDIA

The Bombay Labour Office has communicated a statement with regard to the cost of living index numbers for recent months. The investigation covers foodstuffs, clothing, heating and lighting, and rent. The method of calculation used is that of the standard unmodified budget, based on the pre-war standard of living, which assumes that no change in consumption has taken place since that time. The following results are given.

TABLE XI
(Base : July 1914 = 100)

	Index numbers		Index numbers
Oct. 1920	193	Feb. 1921	162
Nov. "	186	Mar. "	160
Dec. "	181	Apr. "	160
Jan. 1921	169	May "	167

The earliest figure which has reached us is that for October 1920. Since that date a perceptible fall has taken place in the general cost of living index number. In May 1921 it was still 67 per cent. above its pre-war level, which represents a reduction of 13 per cent. compared with the level of October 1920. At that time the cost of living was almost twice what it had been in 1914.

ITALY

Index numbers of the cost of living in the different Italian towns have fluctuated rather irregularly, but not to any large extent in recent months. It is hardly possible to deduce from them any characteristic general tendency.

TABLE XII
(Base : 1920 = 100)

	1920		1921				
	July	Dec.	Jan.	Feb.	Mar.	Apr.	May
Rome	100	123	122	124	126	130	—
Turin	100	118	119	119	122	122	—
Milan	100	118	124	126	128	131	132
Florence	100	120	121	121	127	130	129
Genoa	100	117	120	119	121	120	118
Venice	100	115	119	117	117	118	—

In previous numbers of the *Review* index numbers were published for groups of commodities at Turin and Milan. Those for Florence are given below; in this case we have calculated the index numbers for each group in accordance with data published by the Statistical Office of Florence, which give the expenses in lire for a working-class family of five persons.

TABLE XIII
(Base : July 1920 = 100)

	1920		1921				
	July	Dec.	Jan.	Feb.	Mar.	Apr.	May
Foodstuffs	100	119	122	122	131	133	135
Clothing	100	123	123	123	123	123	115
Heating and lighting	100	117	117	123	124	123	121
Rent	100	110	110	110	110	110	110
Miscellaneous	100	118	119	119	119	131	131
General average	100	119	122	121	127	130	129

In Florence, the fall is beginning to be noticeable in clothing, heating and lighting. In the other groups, except rent, prices are still rising. The general index number has been almost stationary during the last three months.

NETHERLANDS

The two index numbers of retail prices published in the *Maandschrift van het Centraal Bureau voor de Statistiek* refer, one to Amsterdam only, including 27 foodstuffs, the other to the average of the principal co-operative societies of the country, with 27 foodstuffs and 5 household articles (lamp-oil, soda, starch, yellow soap, and soft soap).

The following table gives both index numbers as percentages of those for July 1914.

TABLE XIV
(Base : July 1914 = 100)

		Amsterdam (foodstuffs)	Co-operative societies (foodstuffs and household articles)
May	1920	202	234
Dec.	"	202	218
Jan.	1921	193	203
Feb.	"	193	184
Mar.	"	193	178
Apr.	"	187	174
May	"	183	—

The two index numbers show an almost parallel fall during 1920. In February 1921 a sharp fall took place in the household articles which are included in the index number of the co-operative societies only, and this index number was, therefore, reduced below that of Amsterdam. Since that date both numbers have again been falling at almost the same rate.

NEW ZEALAND

The index numbers of the cost of living published by the Census and Statistics Office relate to a period of six months preceding the month named. They rose slowly up to the end of 1920, and were almost stationary during the early months of 1921. The total increase is one of the smallest shown in any of the countries for which data are available. It should be noted, however, that the investigation does not cover clothing, which in all countries has risen a great deal.

TABLE XV
(Base: first half of 1914 = 100)

	1920				1921		
	Mar.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Foodstuffs	156	169	171	174	176	176	176
Food and rent	140	150	152	154	155	156	156
Food, rent, heating and lighting	143	154	155	157	158	160	160

The index numbers for foodstuffs given in table I relate to the month named; they show some fall during the whole of the first half of 1921.

NORWAY

Index numbers of the cost of living in Norway are only published quarterly. No information is, therefore, available more recent than what was published in the previous number of the *Review*. The index numbers of foodstuffs (table I), as well as those for fuel, which are calculated every month, do, however, show a new fall of a few points in May.

POLAND

Statistics of retail prices and the cost of living have recently been very much improved in Poland. The investigation of retail prices of foodstuffs, together with coal and

mineral oil, has since February covered all towns in Poland with more than 25,000 inhabitants, but the general results are not yet available. The Warsaw investigation has included, since December 1920, not only foodstuffs, but also fuel and lighting, rent, clothing, and miscellaneous expenses. Index numbers have not yet been calculated for the separate groups of articles, but the total average daily expenses in Polish marks for a family of four persons were given as follows :

Dec. 1920	357.55 marks
Jan. 1921	450.68 "
Feb. "	544.77 "

The cost of living is, therefore, still rising rapidly.

SOUTH AFRICA

Index numbers of foodstuffs published by the Census and Statistics Office of the Union of South Africa are still falling steadily. The last received, that for April 1921, is 56 per cent. above its pre-war level. The general index number of the cost of living (foodstuffs, heating and lighting, rent) shows for May a very slight reduction on that of April (1.8 per cent.). It is still 41 per cent. above its pre-war level.

SWEDEN

The general index number of the cost of living in Sweden is still falling. It fell from 249 on 1 April 1921 to 236 on 1 July, but figures for the separate groups of articles are not yet available.

SWITZERLAND

Index numbers for the co-operative societies are still falling (see tables I and II). The fall is specially marked in the index number of the cost of living (including foodstuffs, fuel, and lighting), which fell from 231 on 1 April to 212 on 1 May. This reduction is due to the sharp fall in the price of coal, which fell more than one-third during this last month.

UNITED KINGDOM

The index numbers published by the Ministry of Labour for rent, heating and lighting, and clothing, are only given as approximate in view of the great difficulty of determining them and the considerable variations to which they are liable according to quality.

TABLE XVI
(Base : July 1914=100)

	1920	1921					
	1 June	1 Jan.	1 Feb.	1 Mar.	1 Apr.	30 Apr.	1 June
Foodstuffs	255	278	263	249	238	232	218
Clothing *	430	390	355	340	325	310	300
Heating and lighting *	225	240	240	240	240	250	255
Rent *	118	142	142	144	144	144	145
General average	250	265	251	241	233	228	219

* Approximate figures.

The general index number has continued to fall steadily during the last month. This fall is due exclusively to the marked fall in prices of foodstuffs and clothing, for fuel and lighting have been rising slowly and rent is almost stationary.

UNITED STATES

Index numbers of retail prices of foodstuffs published by the Bureau of Labor Statistics are still falling (see table I). The marked reduction in the rate of fall during March, which was noted in the last number of the *Review*, has not lasted. The rise in prices of meat and other animal foods, as well as in dairy products, almost completely disappeared during May.

The Bureau of Labor Statistics has communicated index numbers of the cost of living in May 1921 for twenty-two different towns, but without yet giving the general index number, which should be based on more than thirty different towns. The general movement of prices from December 1920 to May 1921 can, however, be determined from these data. There has been a distinct fall in the general index number, varying from 7.7 to 11.9 per cent. in different towns. Foodstuffs, clothing, and furniture and furnishing materials have been falling steadily since the second half of 1920. The other three groups, which had been rising up to December 1920, have moved in different ways. Lighting and heating were beginning to fall in the early months of 1921; rent was still rising during the same period, and the "miscellaneous" group was almost stationary.

These remarks are, however, only approximations. They will be confirmed with greater detail by the general index number when the figures for the other towns are also taken into account.

A similar movement is shown by the index numbers of the cost of living published by the National Industrial Conference:

Board. These data are unofficial, but are based on information collected regularly from a very large number of retail dealers scattered over almost the whole of the United States. The averages are weighted in accordance with a standard unmodified budget constructed on a pre-war basis (the index numbers for foodstuffs are those of the Bureau of Labor Statistics).

The following table gives the results for recent months. It will serve to confirm the account given above of the movement of prices.

TABLE XVII
(Base : July 1914 = 100)

	1920			1921		
	Mar.	July	Nov.	Jan.	Mar.	May
Foodstuffs	200	219	193	178	156	152
Clothing	277	266	228	187	174	168
Heating and lighting	149	166	200	200	187	178
Rent	149	158	166	166	171	171
Miscellaneous	183	185	192	192	185	185
General average	195	205	193	181	169	166

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EMPLOYMENT AND UNEMPLOYMENT

The Employment Situation in Russia since the Bolshevist Revolution, I

INTRODUCTION

THE purpose of this article is to consider the labour statistics of the working population of Russia. The discussion has been confined to a part only of that population, namely, to factory workers. Home, transport, agricultural, water-transport workers, and those employed in small industries are not included, as little information about them is available. Any discussion on the statistics of the working population as a whole would have required access to all official figures and publications issued by the Soviet Government. As it is, all the material of this kind available has been *Statistika Truda* for 1918 and for part of 1919, the *Bulletin* of the Commissariat of Labour for 1918 and 1919, and an incomplete collection of Soviet newspapers (*Izvestia* and *Ekonomicheskaja Zhizn*) for 1918 and 1920. These may be considered official publications, as they are issued by state Departments. Use has also been made of the *Russische Korrespondenz*, the work of Larin and Kritzman (*Ocherki khoziastvennoi zhizni v organizatsia narodnago khoziastvi sovietskoi Rossii*, Moscow, 1920), and certain other works referred to by name below.

Statistika Truda (*Labour Statistics*) is a monthly review published by the Statistical Department of the Commissariat of Labour. This Department is under the direction of Strumilin, a hardworking and able official, and issues statistical studies of all kinds relating to wages, labour exchanges, trade unions, cost of living, etc. The review is well edited and contains a wealth of statistical material.

The *Bulleten Kommissariata Truda* (*Bulletin of the Commissariat of Labour*) is also a monthly review, published by a special Department of the Commissariat of Labour. It prints articles by the best Russian experts on labour questions of all kinds, as well as all legislative and administrative regulations issued by the Commissariat.

The *Izvestia* of Moscow is an official daily paper published by the Moscow Soviet. It may be called the *London Gazette* of the Russian Government, and publishes most of the Decrees of the Government.

The *Ekonomicheskaja Zhizn* is a daily paper published by the Supreme Council of National Economy. It is devoted to articles on economic matters, of which it prints a great number.

The *Russische Korrespondenz* is a monthly review in German, published in Berlin, which was started at the beginning of 1920. Though ostensibly published unofficially, it is really an official organ of the Russian Government. All material for publication is supplied directly from Moscow and most of its articles are signed by Soviet officials; it is the channel through which Russian official news is made known in Europe. The review deals principally with economic and labour matters, but also publishes articles on political questions. Most of its articles have previously appeared in the Russian press.

Larin and Kritzman's book, written in June 1920, may also be regarded as an official publication, as it is based on official documents. Larin is one of the chief Soviet officials and the principal organiser of the Supreme Council of National Economy. He has every claim to be regarded as a leading economic authority in Russia.

A few words may be added as to the general character of the information which has been collected. A state of affairs is revealed which is altogether exceptional. While the whole world is in the throes of a grave and menacing unemployment, we find in Russia, on the contrary, a scarcity of labour without precedent in economic history. Russian industry, even in its present attenuated condition, lacks workers; for every workman there are from two up to ten places vacant, according to the industry.

The aim of the present article is to show the growth of this industrial crisis, its causes and origin, and the measures taken by the Government to deal with it.

CAUSES OF UNEMPLOYMENT

When the Bolsheviks, at the beginning of November 1917, overthrew the Provisional Government and established themselves in power, the problem of unemployment among workers was already acute. Various causes contributed to this situation, the chief among them being as follows.

(a) The demobilisation of the army and the fleet threw very large numbers of soldiers, many of them industrial workers, on the labour market. No figures exist showing the actual number of soldiers demobilised, but it is referred to in Bolshevik reports as being "some millions".

(b) The closing of a number of large and small factories engaged on war work deprived many hundreds of thousands of workers of their employment. A considerable number of these persons were skilled workers. No figures of the total number of factories closed exist, but the number closed in Petrograd and Moscow between August and November 1917 is as follows (1).

92 metal works	employing	26,402 workers
31 timber yards	"	2,191 "
5 building material works	"	1,236 "
73 foodstuffs factories	"	6,312 "
18 textile factories	"	9,833 "
10 glass factories	"	1,852 "
27 miscellaneous factories	"	1,675 "
256		49,501 "

Of these workers 10,239 were skilled, and formed about $2\frac{1}{2}$ per cent. of the total number of workers in Petrograd at the beginning of the year.

(c) The German Occupation of south Russia and the transport breakdown kept at home almost a million persons who, at certain seasons, habitually found employment in other places.

It is clear from a consideration of the causes of unemployment given above that the total number of unemployed at the time of the November coup d'état in 1917 must have been very large, although no figures are available.

THE PROVISIONAL GOVERNMENT AND UNEMPLOYMENT

The complexities of the problem were increased by the numbers of prisoners of war and Chinese labourers who, during the war, had replaced men serving in the army and for whom it was desired to substitute demobilised men. Of these two classes, the prisoners of war were the more difficult to deal with on account of their number. According to figures of the Ministry of Labour there were 867,379 prisoners employed on 1 October 1917, of whom 431,690 were engaged in agricultural work.

The Ministry of Labour of the Provisional Government, which was set up at the time of the Revolution of March 1917, in approaching the question of unemployment, were not in a position to set up special machinery for dealing with the abnormal conditions then prevailing. When, as the result of the November Revolution, the functions of the Ministry of Labour passed into the hands of the Bolshevik Commissariat of Labour, this Commissariat considered that the most

(1) *Viestnik Narodnago Komissariata Truda*, No. 1, 1918, pp. 88-91.

urgent problem with which they were called upon to deal, one from which they expected the greatest results, was that of unemployment ⁽¹⁾.

Notwithstanding, the new Government proceeded to demobilise the war industries as quickly as possible, and at the beginning of 1918 the demobilisation of war industries was complete and the country was faced with mass unemployment.

LABOUR EXCHANGES

The first step taken by the Commissariat of Labour was to set up a network of labour exchanges all over the country. Labour exchanges already existed, the Provisional Government, by Decree of 19 August 1917, having ordered that they should be opened in all centres having a population of over 50,000 persons. From particulars given in *Statistika Truda* ⁽²⁾, there would appear to have been twenty-three labour exchanges in operation in November 1917, a number considered by the Commissariat of Labour to be insufficient. They consequently issued a Decree ⁽³⁾, directing the trade unions to open labour exchanges in all centres having a population of over 20,000 persons.

The functions of labour exchanges, as defined by the Decree, were to include (a) the better distribution of labour, (b) the regulation of labour supply and demand, and (c) unemployment relief and insurance. Only those persons registered at labour exchanges were to be entitled to unemployment relief. While these exchanges were necessarily to be set up by the trade unions in centres having a population of not less than 20,000 persons, provision was also made to have others opened in centres with a population under 20,000, if it should be thought desirable. There were to be two kinds of exchanges, district and local, and both types were to be placed under the jurisdiction of a Council of Labour Exchanges, which would decide when they were to be opened and which districts they should serve.

The work to be carried out by these exchanges was to be as follows : (1) registration in their districts of all unemployed persons or persons requiring work; (2) registration of demands and offers of employment; (3) arrangement of conditions of employment; (4) compilation of statistical information ;

(2) This is evident from articles in the first number of *Viestnik Narodnago Komissariata Truda* (January 1918), which emphasise the gravity of the problem, and from the great number of Circulars sent during this period by the Commissariat of Labour to the district authorities, prompting them to give their utmost attention to the matter.

(3) No. 1, 1918.

(4) The Decree is undated, but it appears to have been published about 31 January 1918.

(5) collection of information as to the state of the labour market; (6) opening of dining-rooms, living quarters, libraries, reading-rooms, etc., for workers; and (7) issue of bulletins showing the state of the labour market.

Local labour exchanges were to be managed by a committee of seven persons, of whom four represented trade unions, one the factory, village, or other workers' committees, one the local unemployment insurance office, and one the local authorities. This means that, as trade unions were virtually official bodies, government representatives greatly predominated, while the workers had only one direct representative.

Funds were to be provided by the local authorities, but the exchanges were also to receive a grant from the state, the amount of which was to be determined by the Commissariat of Labour. Fees were not to be charged. Local labour exchanges were placed under the control of the district exchanges, and both were charged to intervene in the case of factory strikes. An annual congress of district and local labour exchanges was to be called ⁽⁵⁾. This congress was to appoint a Council to draw up a code of rules and regulations for the conduct of labour exchanges; but until the first meeting of the congress could be held, this work was to be undertaken by the Commissariat of Labour. With the issue of the Decree all private establishments for engaging labour were forbidden and all registration of unemployment or filling of vacant places was exclusively reserved to the exchanges.

The work of organising the exchanges at first proceeded slowly, and during the first period of the Bolshevik Revolution, while the Government was still at Petrograd, very little was accomplished. It was not until the Government was transferred to Moscow at the beginning of 1918 that any real progress was made.

The increase in the number of labour exchanges between the date when the Revolution broke out and June 1918 is shown by the following table ⁽⁶⁾, which also classifies them according to the source from which their funds were drawn and the nature of the relief afforded.

This table shows the total number of labour exchanges in Soviet Russia in June 1918 to have been 207, grouped in eleven districts. These districts, instead of being determined by the political boundaries of the various Russian provinces, were made to depend on economic or geographical factors.

(5) The first was held in Moscow from 25 to 27 November 1918.

(6) *Statistika Truda*, No. 1, 1918, pp. 5-7. The figures given in the table result from a special enquiry made by the Commissariat of Labour. Of the 207 labour exchanges, 48 were situated in the capitals of provinces, 119 in the principal towns, 16 in small centres, and 24 in factories. The 48 and 119 in the towns correspond approximately to the number of places in Soviet Russia having a population of not less than 10,000.

TABLE I

District	Labour exchanges opened					How supported				Nature of unemployment relief				
	before Oct. 1917	to Jan. 1918	to June 1918	date not specified	total	by local organisation	by state	state and local	not specified	insurance offices	dining-rooms	tea-rooms	night-refuges	living-quarters
(1) Moscow	5	11	57	—	73	21	24	5	23	40	10	4	3	6
(2) Urals	1	4	13	19	37	16	—	1	20	2	6	3	1	2
(3) Volga	1	1	14	8	24	6	1	1	16	3	4	1	1	3
(4) Petrograd	2	3	13	4	22	5	—	—	17	3	6	1	—	—
(5) Voronezh	1	6	6	—	13	3	2	1	7	3	3	2	1	1
(6) Western Siberia	—	1	6	4	11	2	1	1	7	—	1	1	—	1
(7) Northern Caucasus	8	—	1	2	11	3	—	—	8	—	—	—	—	—
(8) Far East	2	—	—	5	7	2	—	—	5	—	—	—	—	—
(9) Eastern Siberia	—	1	—	4	5	—	—	—	5	—	—	—	—	—
(10) Tiflis	3	—	—	—	3	—	—	—	3	—	—	—	—	—
(11) Turkestan	—	1	—	—	1	—	—	1	—	—	—	—	—	—
Totals	23	28	110	46	207	58	28	10	111	51	30	12	6	13

The table also shows the progress made in carrying out the provisions of the Decree relating to night-refuges, dining-rooms, etc., and, thirdly, proves that the larger amount of the funds for the exchanges came from the state. Notwithstanding the considerable provision made for this purpose, it was found insufficient to cover the costs. Most of the labour exchanges were in the Moscow district.

The situation in the labour market at the beginning of 1918 is indicated by a number of tables in No. 1 (1918) of *Statistika Truda*, which show the distribution of unemployment by trades. These tables were compiled by the Commissariat of Labour under circumstances of great difficulty, owing, as is stated, to the removal of the Government from Petrograd to Moscow, to the civil war, and to the incompleteness of some of the statistical returns. Before being published the tables were carefully checked and revised by the Statistical Department of the Commissariat, and, though lacking in completeness, they give a good general view of the situation at the periods to which they refer.

The first of these tables covers the period from January to April 1918. In a preparatory note it is observed that the number of unemployed persons registered and sent to work is probably somewhat less than that given, while in some cases the number of those demanding work has had to be estimated by the Department. The number of unemployed in Petrograd has had to be omitted from this table as,

though the total figure was known, its division into industries had not been worked out.

The table (7) shows the number of persons unemployed, together with the number of places notified and vacancies filled, between January and April 1918, as follows :

TABLE II (8)

	Nos. unempl.	No. of vacancies	No. of places filled	Vacancies as percent. of unempl.	Percent. of unempl. in each industry to total	Percent. of vacancies in each industry to total
Metallurg. industry	30,572	6,895	7,119	22.5	11.6	7.8
Wood	12,551	4,789	4,439	38.1	4.7	5.4
Animal products	3,621	942	923	26.0	1.4	1.1
Fibre	10,563	2,635	2,893	24.9	4.0	2.99
Ores	259	13	17	5.0	0.1	0.01
Paper and printing	4,161	436	388	10.4	1.6	0.5
Chemicals	417	34	33	8.1	0.2	0.04
Food	8,078	2,949	3,710	36.5	3.1	3.3
Building	11,649	2,719	2,421	23.3	4.4	3.16
Textiles	5,339	1,029	908	19.2	2.0	1.2
Commerce	14,121	2,309	2,387	16.3	5.3	2.6
Transport	5,901	2,908	2,549	49.2	2.2	3.3
House employees	16,410	5,531	4,595	33.7	6.2	6.3
Agriculture	1,135	384	320	33.8	0.4	0.4
Hospitals and public health	4,288	748	642	17.4	1.6	0.8
Liberal professions	6,959	957	977	13.7	2.6	1.1
Clerks, shop assistants, etc.	32,956	5,041	5,607	15.2	12.5	5.7
Day labourers	78,564	43,123	32,132	54.8	29.7	48.9
Miscellaneous	16,977	4,712	2,853	27.7	6.4	5.3
Mining	20	18	23	90.0	—	—
Total	264,541	88,172	74,936	33.3	100	100
Add figures for Petrograd	41,073	10,020	7,774	—	—	—
	305,614	98,192	82,710			

INCREASE IN UNEMPLOYMENT

The second half of April and the first half of May 1918 witnessed an influx of demobilised soldiers and war industry workers thrown out of employment. This period must be

(7) *Statistika Truda*, No. 1, 1918, p. 14. According to another report published in the *Bulletin of the Commissariat of Labour*, Nos. 1-4, 1918, p. 76. the number of unemployed for this period appears to have been 343,469, of whom 114,174 were skilled and 206,644 unskilled workers, while the remainder belonged to liberal professions.

(8) Compiled from the records of 772 labour exchanges.

regarded as a most difficult one in the annals of unemployment. The growth of unemployment is shown below (⁹).

TABLE III

District	April	May
	Nos. unemployed	Nos. unemployed
Moscow	100,000	120,000
Petrograd	50,000	70,000
Black earth	15,000	20,000
Volga	50,000	50,000
Urals	18,000	18,000
Western Siberia	10,000	20,000
Eastern Siberia	6,000	6,000
Far East	3,000	4,000
Totals (¹)	252,000 (¹)	308,000 (¹)

(1) The figures represent the total number of unemployed registered in all labour exchanges.

The table shows that the greatest number of unemployed were to be found in the Petrograd and Moscow districts, which were least of all suited to deal with a situation of this nature, on account of the high cost and difficulty of living and the lack of housing accommodation.

From table IV given below, which shows the state of the labour market in May 1918, the position would appear to have undergone some change. This table is compiled from information supplied by 59 labour exchanges, and shows that almost half the unemployed were day labourers (30.1 per cent.) and clerks, shop assistants, etc. (19.2 per cent.). In the table for the first four months of the year the percentage of labourers among the unemployed was 29.8, and of clerks 12.5, so that the situation in these two groups had altered but little.

The greatest demand, as in the first four months of the year, was for day labourers; it amounts to 50.7 per cent. (in January to April it was 49 per cent.). The demand is least for house employees (8.5 per cent.), builders (7.9 per cent.) and metal workers (6.5 per cent.). This may be explained by the fact that domestic service in Russia virtually came to an end with the Bolshevik Revolution, while building operations had practically ceased by this time, and metal works were situated mostly in the occupied provinces.

For each 100 unemployed there are 36.8 places offered, (in the first four months of the year there were 32); the number varies greatly according to industries, being as high as 62 (January to April 54.8) among day labourers, and as low

(9) *Bulleten Narodnago Komissariata Truda*, Nos. 1-4, 1918, p. 71.

TABLE IV ⁽¹⁰⁾

	Nos. of unempl. registered	No. of vacancies	No. of places filled	Vacancies as percent. of unempl. in each industry	Vacancies as percent. of total unempl.	Percent. of vacancies	Percent. of places filled
Metallurg. industry	15,063	3,684	4,249	24.4	9.9	6.5	8.8
Wood	4,709	2,590	2,128	55.0	3.1	4.6	4.4
Animal products	2,113	590	630	27.9	1.4	1.1	1.3
Fibre	6,878	1,045	1,164	15.0	4.5	1.8	2.4
Ores	199	29	15	14.4	0.1	0.1	—
Paper and printing	1,467	662	693	45.1	1.0	1.2	1.4
Chemical	1,750	26	28	1.4	1.1	0.1	0.1
Food	2,704	680	582	25.1	1.8	1.2	1.2
Building	8,004	4,429	3,214	55.3	5.2	7.9	6.6
Textiles	2,566	806	695	31.4	1.7	1.4	1.4
Commerce	6,500	1,599	1,885	24.6	4.2	2.8	3.9
Transport	3,101	1,580	1,077	50.9	2.0	2.8	2.2
House employees	8,963	4,759	3,694	53.0	5.9	8.5	7.6
Agriculture	1,352	400	359	29.5	0.9	0.7	0.7
Hospitals and public health	3,309	915	800	27.6	2.2	1.6	1.6
Liberal professions	3,573	448	507	12.6	2.3	0.8	1.0
Clerks, shop assistants, etc.	29,351	2,044	2,227	6.9	19.2	3.6	4.6
Day labourers	46,080	28,575	23,597	62.0	30.1	50.7	48.5
Miscellaneous	5,182	1,482	1,144	28.6	3.4	2.6	2.3
Mining	63	1	1	1.5	—	—	—
Totals	152,927	56,344	48,689	36.8	100	100	100

as 1.4 among chemical workers. Among clerks (one of the smallest groups) 6.9 places were offered.

This table includes Petrograd, but the observations made on table II also apply to it.

Table V shows comparative figures of unemployment in 37 labour exchanges in all parts of Russia, excluding Petrograd, for the months of May and June 1918. The number of working days in May was less than in June owing to the Easter holidays; the decrease in unemployment, therefore, is all the more noteworthy. This is also indicated by the figures which show the demand for employment and the offers made; in May there were 49.7 offers for every 100 unemployed, -while in June this figure had risen to 70.6.

The table permits us to observe the general decline in unemployment during these two months, the figure for June being 14.5 per cent. less than that for May. At the same time it will be noticed that, while there has been an allround decline, unemployment has increased among clerks by 30 per cent.,

(10) *Statistica Truda*, Nos. 4 and 5, 1918, p. 35.

TABLE V (11)

	Number of unemployed		Number of vacancies		Vacancies as percent. of unemployed	
	May	June	May	June	May	June
Metallurg. industry	5,361	5,416	1,585	2,446	29.6	45.2
Wood	2,830	1,972	1,865	2,153	65.9	109.2
Animal products	1,175	1,036	291	650	25.2	62.7
Fibre	3,779	2,918	654	855	16.8	29.3
Ores	65	121	28	100	43.1	82.6
Paper and printing	869	627	574	685	65.7	109.3
Chemical	54	647	19	144	35.2	22.3
Food	1,634	1,355	608	1,070	37.2	79.0
Building	3,684	2,571	2,414	3,027	65.5	117.7
Textiles	1,050	1,175	365	400	34.8	34.0
Commerce	5,135	3,547	1,503	963	29.3	27.1
Transport	1,799	817	1,117	874	62.4	107.0
House employees	3,200	3,649	1,724	1,801	53.9	49.4
Agriculture	599	694	288	1,129	48.1	162.7
Hospitals and public health	2,547	1,963	849	993	33.3	50.6
Liberal professions	1,628	1,534	254	416	15.6	27.1
Clerks, shop assistants, etc.	6,477	8,471	972	1,415	15.0	16.7
Day labourers	19,349	12,368	16,104	16,332	83.2	132.5
Miscellaneous	3,782	3,924	11,122	3,001	30.0	76.5
Mining	1	757	1	755	100.0	99.7
Totals	65,018	55,562	32,337	39,209	49.7	70.6

among house employees by 14 per cent., among textile workers by 11.9 per cent., and also among chemical workers, miners, agricultural workers, and metal workers. The demand for day labourers shows an increase.

Finally, the summary table No. VI, though it is incomplete, having been compiled from the records of 19 labour exchanges only, including Petrograd, yet permits us to observe a further decline in unemployment in July 1918 ⁽¹²⁾. The number of unemployed in these 19 labour exchanges is shown to have fallen from 89,315 in May to 82,829 in June, a decline of 7.3 per cent., while the number in July had fallen to 72,346,

TABLE VI

	Unemployed	Vacancies	Places filled
May 1918	89,315	34,500	20,278
June "	82,829	51,525	32,808
July "	72,346	51,813	36,831

(11) *Statistika Truda*, Nos. 4-5, 1918, p. 40. Compiled from the records of 73 labour exchanges.

(12) This table is not comparable with table IV, as, though it includes a far smaller number of labour exchanges, the Petrograd figures amount to about 60 per cent. of the totals.

or 12.7 per cent.; for the whole period May to July the decline was 19 per cent. Offers of employment increased between May and June by 49.3 per cent.; between June and July by 0.6 per cent., while the total increase between May and July was 50.2 per cent. The percentage of offers to persons seeking employment also increased; in May there were 37.7 places vacant for every 100 employed, in June 62.6, and in July 71.6.

INCREASE IN NUMBER OF VACANCIES

The change in the situation is reflected by a table ⁽¹³⁾ for the first eight months of 1918, showing the increase in the number of vacancies for each 100 unemployed.

TABLE VII

		Incr. in no. of vacancies	No. of labour exchanges
Jan.-Apr.	1918	32.1	72
May	"	36.8	59
June	"	62.6	67
July	"	73.7	76
Aug.	"	86.7	87

If the increase of vacancies available in the separate labour exchanges is considered, the result is even more remarkable. The two principal labour exchanges, those of Petrograd and Moscow, in which cities unemployment had been at its greatest, as has already been stated, show the following results.

TABLE VIII

	Number of vacancies for each 100 unemployed	
	Petrograd	Moscow
Jan.	20.9	—
Feb.	28.0	} 23.0
Mar.	25.0	
Apr.	30.9	33.9
May	32.0	54.4
June	53.7	81.8
July	64.3	91.8
Aug.	75.2	96.9

A consideration of the separate industries shows that by the end of August there was a remarkable change in the position of those workers among whom unemployment was formerly greatest, namely, day labourers, clerks, metal workers, and house employees. In the case of day labourers unemployment ceased altogether in June, while in the other industries there is a steady decline. The position is shown clearly in table IX.

(13) *Statistika Truda*, Nos. 6-7, 1918, p. 8.

TABLE IX

	Vacancies as percent. of 100 unemployed			
	day labourers	clerks	metal workers	house employees
Jan.-Apr. 1918	54.8	15.2	22.5	33.7
May	62.0	6.9	24.4	53.0
June	130.8	19.3	44.2	49.7
July	127.7	23.6	53.0	65.0
Aug.	146.3	34.5	88.7	82.3

Nor has there been any decrease in the number of vacancies in any of the other twenty groups of industries mentioned in the preceding tables; in every case the position at the end of August shows a decided tendency to the reverse of the position existing at the beginning of the year ⁽¹⁴⁾.

The decrease in the number of factory workers at the end of 1918 and the beginning of 1919 as compared with previous years, though it was not yet appreciated by the Bolsheviks, was already beginning to appear. It is shown in table X, which gives the figures for the Russian provinces from 1910 to the end of 1918. The returns for the Moscow and Petrograd provinces are also shown separately ⁽¹⁵⁾. The figures for 1918 are those supplied by the trade unions and, though not quite complete, as it was not then compulsory for all workers to belong to a union, they still give a fairly accurate view of the situation.

TABLE X

Number of factory workers				
	Moscow province	Petrograd province	32 Russian provinces	Perc. of increase on 1910
1910	335,200	154,000	1,148,000	—
1911	348,100	170,000	1,204,200	5
1912	360,300	189,000	1,256,500	10
1913	384,100	218,300	1,348,300	17
1914	381,200	217,200	1,352,500	18
1915	382,500	267,400	1,440,900	25
1916	411,100	277,900	1,477,900	29
1917	not available	not available	2,047,750	—
1918	388,900	156,600	1,323,300	15

It will be seen that the number of workers at the end of 1918, while higher than in 1910, is lower than at the beginning of the war.

(14) The change appears to have been observed by the Soviet Government, as on 9 September 1918 the Commissariat of Labour sent a Circular to all provincial labour exchanges beginning: "With a view to explaining the reasons for the increase in unemployment which has been observed...", and enclosing a questionnaire relative to the matter.

(15) The figures for the years 1910 to 1916 were collected by the factory inspectors. Those for 1917 are taken from the report presented by "Ossotop" (a special commissioner for fuel distribution); those for 1918 are the figures given by the Central Council of Russian Trade Unions.

Other figures are given for the beginning of 1919 by the Commissariat of Labour, as follows.

TABLE XI

	Total no. of workers employed	Percent. of increase on 1910
Textile	713,811	51.4
Paper and printing	76,887	5.5
Wool	41,658	3.0
Metallurgical	221,544	16.0
Ores	52,720	3.8
Animal products	42,209	3.0
Foodstuffs	117,424	8.5
Chemicals	67,850	4.9
Mining	45,304	3.3
Other industries	7,178	0.6
Total	1,386,585	100.0

The difference (about 60,000) is due to dissimilar methods of collecting the data and to the different fields explored. Moreover, the figures given in table X include only trade union members, while table XI includes both trade union and non-trade union workers; on the other hand, table X includes administrative staffs, who are not included in table XI.

TABLE XII ⁽¹⁶⁾

	No. of unempl.	No. of vacancies	No. of places filled	Percent. of vacancies to each 100 unem.
Metallurg. industry	9,328	9,086	6,203	97.4
Wood	3,442	5,823	2,826	169.2
Animal products	3,456	3,283	2,251	95.0
Fibre	5,785	2,668	3,210	46.1
Ores	253	74	130	29.2
Paper and printing	1,326	1,142	724	86.1
Chemicals	445	218	330	49.0
Food products	3,106	3,264	3,429	105.1
Building	2,832	3,365	2,340	118.8
Textiles	6,108	3,538	2,874	57.9
Commerce	12,673	3,327	5,157	26.3
Transport	2,732	3,350	2,408	126.6
House employees	15,108	10,563	9,624	69.9
Agriculture	475	444	248	93.5
Hospitals and public health	7,689	8,848	6,666	115.1
Liberal professions	4,251	2,736	2,294	64.4
Clerks, shop assistants, etc.	33,225	19,936	20,170	60.0
Day labourers	42,992	61,594	40,556	143.3
Miscellaneous	13,822	12,493	8,898	90.4
Mining	27	27	27	100.0
Total	169,075	155,779	120,365	92.1

(16) *Statistika Truda*, Nos. 11 and 12, 1919, p. 42. Compiled from the records of 204 sub-sections of the Department for the Distribution of Labour (*Otdiel Raspredelenia Rabochei Sili*). These sub-sections were formerly called labour exchanges, and were created by Decree of 27 October 1918, modified by Decree of 25 May 1919.

TABLE XIII (1)

	1918									1919			
	Jan. to April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April
No. of reports used	73	59	67	76	88	94	112	134	136	204	135	135	104
Unemployed registered	343,469	152,927	119,697	116,594	108,023	122,736	203,439	176,029	170,562	169,075	97,662	115,532	59,194
Vacancies notified	110,100	56,344	74,937	85,968	93,660	87,904	153,019	136,436	142,493	155,779	104,616	110,438	63,688
Places filled	943,431	48,689	51,276	64,939	70,765	67,817	124,847	116,496	126,929	120,365	82,786	84,253	45,065
Vacancies per 100 unemployed	32.1	36.8	62.6	73.7	86.7	71.6	75.2	77.5	83.5	92.1	107.1	95.6	107.6
Places filled per 100 unemployed	27.5	31.8	42.8	55.7	65.5	55.3	61.4	66.2	74.4	—	—	—	—
Places filled per 100 vacancies	85.7	86.4	68.4	75.5	75.6	77.1	81.6	85.4	89.1	—	—	—	—

(1) This table is compiled from tables in *Statistika Truda*, Nos. 8-10, 1919, p. 52, and Nos. 11-12, 1919, pp. 42, 45, and 46. It will be noted that for April 1919 only 104 reports were used, as the disturbed condition of the country at that time made the collection of data difficult. The reports, however, come from all parts of Russia and may be regarded as fairly representative of the situation.

The variations in the number of unemployed in June, July, August, and September is, in Russia, seasonal, and corresponds to the ordinary agricultural work done in the country.

At the beginning of 1919 the position became worse, and in January the number of places vacant nearly equalled the number of unemployed. This is shown in table XII.

In January to April 1919 there is, for the first time, an excess of vacant places over the number of registered unemployed persons. From table XIII, which gives a review of the whole period (16 months) from January 1918 to April 1919, it is easy to see how the position has radically altered.

In Moscow, the most important industrial centre in Russia, the position was even more serious, as appears from table XIV.

TABLE XIV ⁽¹⁷⁾

	Unemployed registered	Places vacant	Places vacant per 100 unemployed
Jan. 1919	18,542	26,829	144.7
Feb.	17,537	25,144	143.4
March	17,481	28,713	164.3
April	11,912	16,541	138.9

DISINTEGRATION OF RUSSIAN INDUSTRY

By April 1919 the industrial situation in Russia in general had changed, so that the demand for labour exceeded the supply. In Moscow the change took place as early as January. There were three principal reasons for this reversal of conditions in the labour market. First, and to a less extent at this time, there was disease due to malnutrition and insanitary conditions in the city. In the second place, and more important, was the re-organisation of the Red Army, and compulsory military service, which was introduced in August 1918. As the Bolsheviks had no grip on the peasantry, the ranks of the Red Army were recruited largely from among the skilled factory workers who were eager Communists, or were sympathetic to the Communist party. These men formed the nucleus of the Red Army, and the non-commissioned and junior officers were mostly drawn from among them. The third and most important cause was the occurrence of a food crisis, which began in the autumn of 1918. This food crisis was due to the German occupation of the great corn-producing districts of south Russia, and to peasant revolts preventing the collection of such supplies as existed elsewhere. The town dwellers were consequently forced into the country districts in an effort to produce food for themselves. A report issued

(17) *Statistika Truda*, Nos. 11 and 12, 1919, p. 42.

by the Commissariat for Food Supply ⁽¹⁸⁾ states that in the middle of the summer of 1918 Petrograd and Moscow received only three to four truck-loads of corn weekly at this period and refers to "the grim hand of famine grasping the great industrial centres by the throat". So serious was the situation that detachments, numbering in all 20,000 men, were kept permanently in the provinces forcibly to requisition surplus grain which the peasants refused to surrender voluntarily. A Decree of 6 August 1918 called upon the workers' organisations to co-operate with the authorities in order to supply the towns with food. The flight from the towns was accentuated by the redistribution of land in the villages in the autumn of 1918; this attracted peasant workers to their homes, about half a million of those employed in the factories being interested in the redistribution, as they had not completely severed their connection with the land. The first workers to leave were those employed in war industries who had come to the towns during the war; this is proved by the rapid decrease in the number of metal workers. The next were those who were employed in the towns before the war, but who had allotments in the country. Thus there remained only those who, having been employed for some generations in the towns, had lost all connection with the land and who were mostly skilled workers. The majority of workers who returned to the country were therefore unskilled ⁽¹⁹⁾.

The Bolshevik authorities encouraged emigration to the country, regarding it as a remedy for the famine and disturbances arising from food shortage. They later discovered, however, that the exodus would mean the practical dissolution of Russian manufacturing if it continued, and when the movement was already well underway they began — too late, however, — to take measures to prevent it. The changes and developments to which these measures gave rise will be considered in a second article.

(18) *Vtoroi god borbi s golodom*, Moscow, 1919, p. 7 sqq.

(19) The results of the redistribution appear to have been very far-reaching. According to Strumilin there were at the beginning of 1917 about a million and a half agricultural labourers without land who, by the end of 1918, had disappeared completely. (*Russische Korrespondenz*, July 1920, *Die Schickung des Proletariats in Sowjetrussland in den Jahren 1917 bis 1919*).

The Employment of Women in American Industry⁽¹⁾

A RECENT Report ⁽²⁾ by the Women's Bureau of the United States Department of Labor on the new position of women in American industry gives the results of an enquiry financed by the War Work Council of the Young Women's Christian Association, begun during the war and carried down to August 1919. The enquiry was undertaken to secure definite facts with regard to the increase during the war in the number of women in industry, the kinds of work in which they were employed and their success or failure in new lines of work. The Report is based partly on field work, partly on questionnaires filled out by employers and organisation leaders, and partly on data contained in the records of the government war agencies. The enquiry was confined to industrial occupations, ignoring conditions in mercantile, clerical, and professional pursuits.

It was impossible to make such a complete survey as would show the increase during the war in the number of women industrially employed, but there were many indications that it was large.

"The 2,124 iron and steel firms included in this survey employed over three-fourths as many women after the first draft, and nearly a third again as many women after the second draft, as were reported for the entire 17,862 firms included in the 1914 Census of Manufactures. Plants engaged in the manufacture of airplanes and airplane parts numbered but 16, and employed but one woman among their 211 wage-earners, according to the Census of 1914. On the other hand, 40 plants which were included in this survey and which were engaged exclusively in making planes or parts employed after the second draft 6,108 women in a total of 26,470 wage-earners... Again, 1,352 plants, representing lumber and its re-manufactures *in this survey, employed nearly seven-tenths as many women after the second draft as were reported by the entire 42,016 plants included in the Census of Manufactures for 1914."

The increase in the number of women employed was coincident with a marked change in the relative position of leading industries with respect to the use made of women. Before the war the textile and garment-making industries, together with the preparation of food products and tobacco, were the leading industries in the employment of women. Among the plants covered by this survey there was during the war an actual falling off in the number of women employed

(1) Reprinted, with the omission of two paragraphs, from the U. S. A. Department of Labor *Monthly Labor Review*, Jan. 1921.

(2) U. S. A. Department of Labor, Women's Bureau: *Bulletin of the Women's Bureau*, No. 12: *The New Position of Women in American Industry*, Washington, 1920.

in the textile and textile products industries and in the tobacco occupations, while the number employed in iron and steel industries and in the manufacture and re-manufacture of lumber nearly doubled. The following table, compiled from a number given in the Report, shows for the leading war industries the change, from the first to the second draft, in the actual number of women employed, and in the proportion they formed of the total working force.

TABLE I

	Number of plants reporting after both first and second drafts	Total labour force		Number of women employed		Number of women per 1,000 wage-earners	
		after first draft (1)	after second draft (2)	after first draft (1)	after second draft (2)	after first draft (1)	after second draft (2)
Iron and steel	2,124	394,256	429,377	23,948	40,588	61	95
Metal products other than iron and steel	896	132,844	128,768	19,733	23,150		78
Manufacture and re-manufacture of lumber	1,352	154,496	142,272	7,184	13,325	46	94
Chemicals and allied products	733	91,882	93,025	8,986	13,230	98	142
Leather and leather products	810	114,107	107,634	35,022	35,513	307	330
Stone, clay, and glass products	322	38,680	33,469	4,441	5,197	115	155
Textile and textile products	3,306	411,349	372,072	225,874	206,565	549	555
Food products, beverages, and allied products	1,572	164,114	174,838	34,593	41,695	211	238
Tobacco and tobacco products	378	40,348	34,879	22,858	20,245	566	580
Paper and paper goods	551	60,778	59,622	13,361	14,028	220	235
Printing, publishing, and engraving	705	49,502	46,618	12,225	12,727	247	273
Other war industries	1,827	277,209	297,679	47,178	54,358	170	183
	14,576	1,929,565	1,921,257	455,453	480,631	236	250

(1) "After first draft" indicates a period 7 to 8 months after the first draft in February-March 1918.

(2) "After second draft" indicates a period 4 to 5 months after the second draft in October-November 1918.

The Report states :

"The emergency created by the shortage of labour cleared the woman worker's way in certain important industries to the "master machines" and brought to her hand the "key" occupations that control entrance to desirable positions in many industries. It gave her a chance to be tried out as a responsible member of the force of constructive skill. In the iron and steel and other metal industries, for instance, it opened to her the machine-shops and the tool-rooms and introduced her—though in limited numbers—into the steel works and rolling mills... In certain other industries, too, pressed hard by the shortage of labour and the demands of the war, women were given a trial in occupations requiring judgment, precision, and decision."

How successfully women handled these new kinds of work is a matter discussed at some length in the Report. The following table gives the opinions of the employers who responded to the enquiry on this point.

TABLE II

	Firms—		total women substituted ⁽¹⁾	Firms reporting women's work—					
	substi- tuting women for men	report- ing number of women substi- tuted		as satisfactory or better than men's		not so satis- factory as men's		not com- par- able	
				number	per- cent.	number	per- cent.		
Metal working	278	237	37,683	212	82.8	44	17.2	22	
Chemical working	58	50	6,935	32	66.7	16	33.3	10	
Rubber working	11	10	4,959	9	100.0	—	—	2	
Wood working	152	145	2,545	91	68.4	42	31.6	19	
Textile making	16	13	1,589	12	80.0	3	20.0	1	
Leather working	20	19	1,545	17	85.0	3	15.0	—	
Electrical working	22	21	897	18	90.0	2	10.0	2	
Abrasive material and glass working	14	12	730	9	75.0	3	25.0	2	
Miscellaneous work on airplanes, sea- planes, ships, and musical instruments	15	14	1,834	8	80.0	2	20.0	5	
Total	562 ⁽²⁾	533 ⁽²⁾	58,717	386 ⁽²⁾	77.4	113 ⁽³⁾	22.6	63	

(1) Includes women employed only in the 533 firms which reported the number of women substituted as well as the fact of substitution.

(2) 17 firms substituting women in metal-working occupations also substituted women on chemical, electrical, wood, textile, or abrasive material and glass-working occupations; these did not report the numbers employed on either substance. Seven firms substituting women in wood working occupations also substituted women on textile and miscellaneous work.

(3) 22 firms substituting women on two materials reported their work to be satisfactory in each group.

(4) 2 firms substituting women on two materials reported their work to be unsatisfactory in each group.

It will be seen that women were particularly successful in their new occupations in the rubber, electrical, leather, and metal working trades. Generally speaking, employers all commented on the fact that women were unprepared for skilled work, and that in order to substitute them for men successfully, it was essential to provide definite training. For the most part, this was given in the shops, by means of a vestibule school. In some cases employers expected to train the women at their machine, but, in general, this was not found as satisfactory as the preliminary training.

Another general comment of employers dealt with the inferior physical strength of women. This, which was at first considered an unmixed disadvantage, afterwards proved to have modifying features. Where the work, as at a lathe, involved lifting the piece to be turned into place, the amount which a woman might handle was limited by law, the permissible weight varying in the different States from 15 to 45 pounds. Where the pieces exceeded the legal limit of weight, the employment of women necessitated putting in mechanical devices for lifting and handling them, an expense which was not necessary in the case of men. Soon, however, it was found that the women were turning out considerably more

work than men on the same job, and when, by way of experiment, men were given the same mechanical devices, their output, too, shot up. Here the mere fact that a man's strength was considered equal to the task of lifting the pieces without mechanical help had kept the management from discovering the efficiency of employing machinery rather than human muscle.

In general, it was found that where the work was very rough or dirty, women did not succeed so well at it. Lumbering, for instance, and saw-mill work and crane operating were cited as kinds of work for which women usually were unfitted. In regard to this last mentioned occupation, it was a rather curious fact that, while women ordinarily disliked the conditions of the work, when one was found who did not share this objection, she was apt to prove singularly successful.

"When an efficient woman was secured, who could do the work and liked it, she seems to have made an exceptionally fine crane operator. She is reported to be a better judge of distance, to be quicker, to be more careful of the lives of the workers beneath her and to meet with fewer accidents. At the Watertown arsenal the men in the forge-shop requested that the women crane operators be retained. Two of the seven firms covered, which reported on their 1919 labour force, retained their crane women. As a whole, however, this did not prove to be an occupation especially well adapted to women."

The survey extended only to August 1919, so that it does not contain data showing conclusively whether or not women will retain their places in the new occupations opened to them by the war. At that date, however, the prospect of their doing this was considered hopeful. The following table shows the relative retention of men and women in 1,012 firms in four leading war-agent and war-implement industries at the time of the Armistice and nine months later.

TABLE III

	Number of firms	Wage earners employed in—					
		November 1918		August 1919			
		men	women	men		women	
				number	per- cent. of pre- Armistice force	number	per- cent. of pre- Armistice force
Iron and steel and their products	365	244,853	40,916	142,212	58.1	14,123	34.5
Metal and metal products other than iron and steel	202	62,132	16,177	52,891	85.1	12,622	78.0
Lumber and its re-manufactures	259	32,185	3,227	36,619	113.7	2,671	82.8
Chemicals and allied products	186	89,881	14,553	32,104	35.7	2,967	20.4
Total	1,012	429,051	74,873	263,826	61.5	32,383	43.3

The two groups which show the greatest reduction in the number of men and women alike are the iron and steel and the chemical industries. In both of these the largest plants had been engaged on war-time orders, which ceased at once when the Armistice was signed ; and in both, because of the war-time rush to get out their orders, numbers of women had been engaged on part time. Married women especially, who did not wish to leave their homes for the whole day, had been brought in for short shifts. Naturally, when the rush stopped, these were dismissed, full-time workers being retained in preference. "These part-time workers account in large measure, according to the statement of the employers, for the difference in the relative number of men and women remaining after the signing of the Armistice". Other industries, in which the part-time worker was not so common, show a much larger percentage of women retained in August 1919. Taking the group as a whole, it is regarded as a striking fact that nine months after the cessation of hostilities nearly 45 per cent. of the women were retained as compared with a little over 60 per cent. of the men.

The findings of the survey are summed up as follows.

First : the popular belief that women in industry rendered real service to the nation during the war is sustained by the figures showing the numbers of women employed both in war-agent and implement industries and in war-food and fabric industries, by the preponderance of evidence from employees holding important government contracts and by the official statement of the Assistant Secretary of War, acting as Director of Munitions.

Second : the labour shortage and excessive demands on industries essential to the production of implements and agents of warfare resulted during the war in—

- (a) a sharp increase in the number of woman workers in these industries during the war ;
- (b) a marked decrease in the number of women in the traditional woman-employing industries, resulting in a relief of the long-standing congestion of woman labour in these pursuits and in part contributing to a marked increase in the wage-scale of the women remaining in these industries ;
- (c) the employment of woman labour in other skilled crafts, from which women had been practically debarred before the war.

Third : when the managers of private, government, and government-controlled plants were confronted with the necessity of employing women in skill-exacting positions, there were practically no trained women available, because—

- (a) public and private vocational institutions had given little encouragement to the training of women in mechanical occupations ;
- (b) organised labour policies in fact, although not always in official regulations, discouraged apprentice work for women in skilled occupations.

Fourth : the training of women employed in skilled occupations during the war was provided principally by the employing firms.

Fifth : the success attending the emergency employment of women in occupations requiring a high degree of skill, and the expansion of commercial trade, has resulted in the retention of women in most of these crafts and industries since the close of the war, and bids fair to encourage a larger use of woman labour in the future.



Statistics of the Unemployed

based chiefly on returns from workers' organisations

THE table giving statistics of unemployment among members of trade unions in different countries, which was given in the *International Labour Review* for July-August (1), has been continued in the present issue and brought up to date.

For the Netherlands the returns of the Dutch Federation of Trade Unions (2) have been added to the table, as these relate to a much later date than those published by the Dutch Government, and cover more than 50 per cent. of the unions figuring in the official returns.

The table has further been extended to include an index number of unemployment, based on the number of days of unemployment, for the countries where this was possible. For Germany and the Netherlands the index is published officially, and for Belgium and Sweden it has been calculated in the same way as the index previously given for the Netherlands. The index shows the percentage which the total number of days of unemployment bears to the total number of possible days of employment, i.e. to the number of workers included in the returns multiplied by the number of working days in the period under consideration. The Swedish index is based on the returns of those unions only which report the number of working days lost. The percentage of workers unemployed is considerably heavier in these unions than in the total of all unions reporting, thus accounting for the high level of the index as compared with the general percentage of unemployed.

It cannot be too strongly emphasised that these figures do not accurately represent the total amount of unemployment in the different countries. Authoritative statistical data for estimating with any degree of precision the number of unemployed in any country do not, in general, exist. Only in the United Kingdom, where the statistics cover almost the whole of the unemployed population, is there a record approaching completeness of the number of persons totally unemployed. In other countries it is impossible to state broadly whether workers outside trade unions experience more or less unemployment than trade union members. It seems, however, that, where unemployment is not very acute, the percentage of unemployment is greater among non-unionists than among union members.

(1) *Inter. Lab. Rev.*, Vol. III, Nos. 1-2, p. 138.

(2) *Nederlandsch Verbond van Vakvereeningen*.

STATISTICS OF NUMBERS UNEMPLOYED

	Australia			Belgium			Canada		Denmark		Germany			Massachusetts		Netherlands				Norway		Sweden			United Kingdom			
	numbers covered (in 1,000's)	percentage unemployed		numbers covered (in 1,000's)	percentage unemployed	index of unemployment	numbers covered (in 1,000's)	percentage unemployed	numbers covered (in 1,000's)	percentage unemployed	index of unemployment	numbers covered (in 1,000's)	percentage unemployed	numbers covered (in 1,000's)	percentage unemployed	index of unemployment	numbers covered (in 1,000's)	percentage unemployed	numbers covered (in 1,000's)	percentage unemployed	numbers covered (in 1,000's)	percentage unemployed	index of unemployment	numbers covered (in 1,000's)	percentage unemployed	insurance act		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	
Aver. 1913	246	6.5	77	2.7	*	*	117	7.5	1,973	2.9	2.1	175	6.3	65	5.1	5.0	*	*	16	1.8	927	2.1	2,041	3.6	(29)			
" 1914	269	8.3	77	3.9	*	*	128	9.9	1,635	2.6	1.1	172	10.4	76	16.2	13.8	*	*	16	2.4	970	3.3	2,326	4.2	3.6			
" 1915	276	9.3	*	*	*	56	8.0	134	7.7	1,019	3.2	2.6	170	7.7	106	14.6	12.0	94	11.0	16	2.2	922	1.1	2,078	1.2			
" 1916	290	5.8	*	*	*	105	1.9	145	4.9	818	2.2	1.7	176	3.0	132	5.8	5.1	118	5.4	17	0.9	943	0.4	2,029	1.6			
" 1917	287	7.1	*	*	*	128	1.9	160	9.2	939	1.0	7.1	189	4.2	148	9.6	6.5	152	7.0	18	1.2	87	3.9	966	0.6			
" 1918	300	5.8	*	*	*	164	1.4	218	17.4	1,245	1.2	20.8	222	2.9	190	10.0	7.5	191	6.5	18	1.9	105	4.4	7.2	1,108	0.8		
" 1919	310	6.6	*	*	*	177	3.6	296	10.7	3,686	3.7	2.3	259	5.3	300	8.9	7.7	238	6.1	18	1.9	121	5.5	7.0	1,338	2.4		
" 1920	342	6.5	*	*	*	192	4.6	306	5.8	5,260	3.8	2.3	270	16.1	400	7.2	5.8	245	5.5	19	2.0	129	5.4	6.5	1,563	2.4		
End of																												
Apr. 1920	*	*	*	*	*	182	2.5	314	3.5	5,027	2.0	*	*	*	398	8.0	6.7	258	5.6	18	1.3	114	3.5	4.6	1,561	0.9	4,161	2.8
May	*	*	*	*	*	202	2.4	304	2.8	5,234	2.7	*	*	*	397	7.3	6.2	255	5.8	18	0.9	121	2.9	3.8	1,572	1.1	4,161	2.7
June	343	6.2	*	*	*	194	2.1	306	2.1	5,556	4.0	1.9	248	14.6	407	5.9	5.0	249	5.1	18	0.7	126	3.4	3.9	1,603	1.2	4,161	2.6
July	*	*	*	*	*	186	2.3	310	2.1	5,074	6.0	*	*	*	401	4.9	4.2	241	5.4	19	1.1	125	2.8	3.7	1,498	1.4	4,197	2.7
Aug.	*	*	*	*	*	187	2.4	304	2.4	5,555	5.9	*	*	*	408	5.0	4.2	235	5.1	19	1.4	134	3.0	4.5	1,669	1.6	4,197	2.9
Sept.	345	6.2	118	5.8	2.0	189	3.3	308	2.7	5,442	4.5	3.4	255	16.4	407	4.1	3.3	232	4.0	18	1.7	151	2.9	3.8	1,636	2.2	4,197	3.8
Oct.	*	*	263	6.4	2.6	215	6.1	315	3.6	5,325	4.2	*	*	*	404	4.2	3.2	231	4.1	19	2.1	142	4.3	5.6	1,401	5.3	4,197	4.1
Nov.	*	*	498	7.2	4.9	216	10.2	317	6.1	5,629	3.9	*	*	*	402	7.2	5.2	229	2.3	19	3.1	147	7.0	6.7	1,612	3.7	11,200	3.7
Dec.	351	7.8	546	17.4	7.2	208	13.1	311	15.1	5,664	4.1	2.5	297	29.2	399	13.4	10.2	225	11.5	19	6.5	146	15.8	11.2	1,535	6.1	11,900	5.8
Jan. 1921	*	*	609	19.3	10.9	198	13.1	307	19.7	5,751	4.5	*	*	*	—	—	—	—	—	18	10.5	155	20.2	17.5	1,587	6.9	12,000	8.2
Feb.	"	"	621	22.7	11.5	198	16.1	304	23.2	5,650	4.7	*	*	*	—	—	—	—	—	18	13.1	147	20.8	20.2	1,534	8.5	12,000	9.5
Mar.	"	—	668	31.5	10.9	207	16.5	294	23.6	5,779	3.7	2.7	—	—	—	—	—	—	—	18	14.9	165	24.6	20.2	1,528	10.6	12,000	11.3
Apr.	"	*	617	31.2	13.7	204	16.3	294	21.7	5,510	3.9	*	*	*	—	—	—	—	—	18	14.7	145	24.2	24.3	1,339	17.6	12,000	15.0
May	"	*	637	32.3	15.8	201	15.5	299	18.6	5,572	3.7	*	*	*	—	—	—	—	—	—	—	—	—	25.0	1,343	22.2	12,000	17.3

The sign * signifies "figures not available".

The sign — signifies "figures not yet received".

As regards under-employment or short time — the system under which workers work a reduced number of days per week or hours per day — the data are even less reliable. In fact, for many countries no statistics exist. In some cases the percentage of total unemployment is kept low by means of short time arrangements or even by legislation or collective agreements preventing the discharge of workers.

While the figures given in the table cannot be used as a measure of the total amount of unemployment *in* a country, still less can they be used for comparing the volume of unemployment *between* two or more countries. As shown in the January number of the *Review* ⁽³⁾, the differences in the scope of the returns, in the definition of unemployment, and in the reliability of the figures prevent any international comparison.

NOTES TO TABLE

Australia : *Quarterly Summary of Australian Statistics.*

The figures show the number of persons who were out of work for three days or more during a specified week in each quarter; they include unions which do not pay unemployment benefit. Unions of workers in permanent employment, such as railwaymen, or of casual workers, such as dockers, are excluded.

Belgium : *Revue du Travail.*

The figures are obtained from the returns of local unemployment funds, and refer to the last working day of the month. The very high percentage of unemployment is possibly due to the inclusion of workers unemployed during the week as distinct from those unemployed on a fixed day of the week. If so, this would explain the great difference between the index of unemployment and the percentage of unemployed.

Canada : *The Labour Gazette* of Canada.

The figures refer to the last working day of the month. They include unions which do not pay unemployment benefit.

Denmark : *Statistiske Efterretninger.*

The figures are derived from trade union reports, combined with returns of the Central Employment Bureau. They are compiled every Friday, those for the last Friday of the month being given in the table. Only unions paying unemployment benefits are included.

Germany : *Reichsarbeitsblatt.*

The figures refer to the last working day of the last week of each month. Only unions paying unemployment benefit are included. Legislation restricting the discharge of workers is in force, and short time is regulated by an extensive system of collective agreements.

(3) *Inter. Lab. Rev.*, Vol. I, No. 1, p. 118.

Massachusetts : *Massachusetts Industrial Review.*

The figures refer to the last day of each quarter, and cover unemployment due to "lack of work or material", and to "unfavourable weather". They include unions which do not pay unemployment benefit. Statistics are also published showing the numbers unemployed owing to sickness, trade disputes, etc.

Netherlands : *Maandschrift van het Central Bureau voor de Statistiek.*

The figures are weekly averages over a period of four or five weeks. Unions which pay no unemployment benefit are included.

Norway : *The Labour Gazette* of Great Britain.

The figures refer to the last day of the month, and only cover a small proportion of trade unionists. They include only unions which pay unemployment benefit.

Sweden : *Sociala Meddelanden.*

The figures refer to the last day of the month, and include unions which do not pay unemployment benefit.

United Kingdom : *The Labour Gazette* of Great Britain.

The trade union figures refer to the last working day of the month, and only relate to unions which pay unemployment benefit. Trade unions of workers in regular employment, such as railwaymen, are not included.

The figures for insured workers give the number of persons totally unemployed whose unemployment books were lodged at employment exchanges on the last Friday of the month.

The figures for October 1920 and April and May 1921 are exclusive of the coalmining industry.



The State of Employment in May 1921

THE present article is a continuation of the notes on the statistics of employment in certain countries published in the May-June number of the *International Labour Review*.

CANADA

The table below shows the number of persons on the pay-rolls of some 5,000 firms reporting weekly to the Employment Service of Canada. A comparison is made with the position in identical firms on 17 January 1920.

TABLE I

	No. of firms	Employees	
		number	percent. of staff on 17 Jan. 1920
Week ending			
22 Jan. 1921	5,245	616,983	88.6
19 Feb. "	5,276	616,065	88.5
19 Mar. "	5,172	600,693	86.5
16 Apr. "	5,321	609,946	85.9
14 May "	5,322	614,857	86.5

It will be seen that for the period ending 14 May a slight increase in employment was shown for the first time in 1921.

GERMANY

The increase in employment during April, according to the returns of the sickness insurance funds (1), was continued, but at a lower rate, during May. The membership of the 6,629 funds for which returns were published for 1 June 1921 was 12,952,109, excluding sick people unable to work and unemployed persons. On 1 May 1921 the membership of the same funds was 12,827,832, thus indicating an increase of 1 per cent., as against an increase during April of 2.5 per cent., in the membership of 6,731 funds. The following table classifies the returns according to the character of the fund.

(1) *Inter. Lab. Rev.*, Vol. II, Nos. 2-3, p. 53.

TABLE II

Class of fund	no. of funds	Membership on 1 June			
		men		women	
		number	percentage incr. (+) or decr. (—) on previous month	number	percentage incr. (+) or decr. (—) on previous month
Urban	1,972	4,862,909	+ 1.5	3,232,002	+ 0.6
Rural	372	815,431	+ 1.4	849,966	+ 2.1
Factory	3,521	2,263,903	+ 0.2	533,869	— 0.1
Guild	647	190,038	+ 2.2	59,742	+ 2.0
Mining	117	140,978	— 0.3	3,271	+ 0.4
Total	6,629	8,273,259	+ 1.1	4,678,850	+ 0.8

According to the *Reichsarbeitsblatt*, the slackening in the improvement is ascribed partly to the fact that the increase of employment during May was largely of a seasonal character, and partly to the disturbing influence of the "sanctions" on economic conditions in Western Germany and in the ports.

The total membership of the 2,344 urban and rural funds, including persons entitled to insurance and sick persons, is distributed as follows.

TABLE III

Occupation	Membership on 1 June			
	men		women	
	number	percentage incr. (+) or decr. (—) on previous month	number	percentage incr. (+) or decr. (—) on previous month
Agriculture and forestry	1,182,683	+ 1.2	994,218	+ 1.3
Domestic service	52,197	+ 1.1	817,680	+ 0.7
Casual work	37,318	— 0.1	55,578	+ 0.9
Home work	56,276	+ 3.3	115,413	+ 1.6
Other occupations (chiefly industrial)	4,865,717	+ 1.4	3,152,250	+ 0.7
Total	6,194,191		5,136,139	

The difference between the totals shown in this table and those shown in table II is due to the fact that the former table excludes sick and unemployed.

A classification by industry of the 2,565 factory sickness insurance funds for which comparative figures are available gives the following results, the sick and unemployed being excluded.

TABLE IV

	No. of funds	Men				Women			
		No. on 1 June	percentage incr. (+) or decr. (—) on previous month		No. on 1 June	percentage incr. (+) or decr. (—) on previous month		No. on 1 June	percentage incr. (+) or decr. (—) on previous month
			1 June compared with 1 May	1 May compared with 1 April ⁽¹⁾		1 June compared with 1 May	1 May compared with 1 April ⁽¹⁾		
Agriculture, forestry, and gardening	101	13,807	+ 0.4	+ 1.2	8,241	— 0.7	+ 10.1		
Metals and engineering	844	813,134	+ 0.1	+ 1.0	75,562	— 1.0	— 0.7		
Electrical industr.	24	69,041	— 0.6	— 0.7	28,787	— 3.8	— 3.8		
Chemicals	125	105,108	— 0.1	— 1.4	13,968	+ 3.3	+ 0.4		
Textiles	812	126,251	+ 1.3	+ 2.0	155,885	+ 1.0	+ 1.0		
Wood working	100	17,578	+ 0.1	+ 1.2	3,904	— 0.5	+ 4.2		
Foodstuffs	304	45,389	+ 1.7	— 0.3	40,691	+ 3.5	+ 2.6		
Clothing	82	12,430	+ 2.4	+ 1.7	13,902	+ 1.4	+ 1.7		
Building	173	73,258	+ 2.6	+ 4.9	2,677	— 1.4	+ 3.8		

(1) These percentages refer to the 2,598 funds classified in the corresponding table for the previous month. See *Inter. Lab. Rev.*, Vol. II, Nos. 2-3, p. 53.

The chief improvement among men continues to be in the building industry; decreases are only shown in the electrical and chemical industries. Among women, on the other hand, there has been a marked increase in employment in the chemical industry; the increase in the number employed in agriculture recorded in the previous month was not maintained during May.

UNITED KINGDOM

The summary of employers' returns published in the *Labour Gazette* for June shows a further decline in employment during May. This was largely the result of the continued stoppage of work at the mines, owing to the coal dispute. In some cases, including pig-iron, iron and steel, tinplate, and pottery manufacture, work was almost entirely suspended. No returns were received in respect of coal mines, owing to the national stoppage.

TABLE V

(a) *Certain mining and metal trades*

	Workpeople included in the returns for May 1921	May 1921	incr. (+) or decr. (—) as compared with a	
			month ago	year ago
Iron mining	(1)	days worked per week by mines	days	days
Shale "	1,87	(1)	—	+0.05
Pig iron	—	furnaces in blast	no.	no.
Tinplate and steel sheet	—	1 mills working	—10	—273
		13	—22	—488
Iron and steel	16,706	shifts worked (one week)	per cent.	per cent.
		83,065	—58.8	—87.4

(b) *Other trades*

	Number of workpeople			Total wages paid to all workpeople		
	week ended 28 May 1921	incr. (+) or decr. (—) on a		week ended 28 May 1921	incr. (+) or decr. (—) on a	
		month ago	year ago		month ago (2)	year ago (2)
Textiles		per cent.	per cent.	£	per cent.	per cent.
Cotton	36,551	—36.4	—60.4	67,075	—40.2	—76.2
Woollen	10,891	—18.2	—35.6	18,848	—23.9	—57.6
Worsted	22,173	—20.7	—31.7	34,573	—23.5	—54.3
Linen	11,089	—1.9	—59.0	14,246	—9.6	—66.5
Jute	3,791	—31.3	—48.4	4,345	—40.2	—71.1
Hosiery	12,422	—5.4	—36.0	20,906	—4.5	—53.8
Lace	4,180	—1.5	—43.6	6,389	+0.2	—62.5
Other textiles	11,311	—11.6	—18.7	17,114	—22.1	—42.6
Bleaching, etc.	17,591	—11.4	—29.6	41,219	—17.6	—56.3
Total textiles	129,999	—21.5	—46.2	224,715	—26.4	—65.2
Boot and shoe	45,757	—1.1	—18.5	99,492	—6.1	—34.0
Shirt and collar	10,612	—8.2	—22.0	12,758	—13.1	—43.8
Readymade tailoring	17,587	—8.6	—30.2	26,835	—12.7	—44.7
Paper	8,466	—25.9	—38.9	19,811	—29.3	—52.0
Printing and book-binding	13,725	—5.2	—12.9	41,981	—7.4	—11.9
Pottery	2,012	—69.0	—84.4	5,439	—62.2	—83.3
Glass	3,276	—49.6	—70.9	8,031	—58.8	—78.5
Brick	4,034	—16.8	—36.2	13,468	—18.6	—35.3
Cement	7,461	—18.0	—20.2	27,062	—23.0	—18.5
Food preparation	46,957	—1.6	—13.8	106,752	—4.3	—15.9
Grand Total	289,886	—15.5	—37.1	586,344	—19.4	—51.5

(1) Owing to the dispute in the coal mining industry, almost all the iron mines were closed.

(2) Comparison of earnings is affected by changes in rates of wages.

UNITED STATES

The United States Department of Labor publishes two monthly reports on the state of employment, one compiled by the Bureau of Labor Statistics, the other by the U.S. Employment Service. The former shows the volume of employment in over 800 representative firms in 13 manufacturing industries and in bituminous coal-mining, employing in all about 540,000 persons. In tables VI and VII below the position in May 1921 is compared with that in May 1920 and in April 1921 respectively.

TABLE VI

	Estab- lish- ments report- ing for May both years.	Period of pay- roll	Number on pay-roll in May		Per cent. of incr. (+) or decr. (—)	Amount of pay-roll in May		Per cent. of incr. (+) or decr. (—)
			1920	1921		1920	1921	
Iron and steel	111	½ mon.	166,296	111,123	—33.2	\$ 12,341,536	\$ 5,419,262	—56.1
Automobile	44	1 wk.	128,982	85,159	—34.0	4,471,040	2,874,032	—35.7
Car build- ing and repairing	60	½ mon.	69,577	41,038	—41.0	4,371,966	2,667,698	—39.0
Cotton mfg.	60	1 wk.	48,875	48,346	— 1.1	1,044,267	822,848	—21.2
Cotton finishing	17	"	12,497	12,423	— 0.6	295,750	273,334	— 7.6
Hosiery and underwear	60	"	31,512	23,502	—25.4	649,394	387,978	—40.3
Woollen	51	"	48,339	46,465	— 3.9	1,261,927	1,097,338	—13.0
Silk	47	2 wks	20,645	18,957	— 8.2	995,505	856,269	—14.0
Men's clothing	43	1 wk.	35,298	25,695	—27.2	1,260,437	757,166	—39.9
Leather	35	"	17,307	11,247	—35.0	465,138	255,816	—45.0
Boots and shoes	85	"	69,873	56,788	—18.7	1,751,473	1,286,063	—26.6
Papermaking	57	"	32,574	21,366	—34.4	976,203	504,387	—48.3
Cigars	56	"	16,563	16,608	+ 0.3	369,542	321,397	—13.0
Coal (bitu- minous)	105	½ mon.	26,235	22,252	—15.5	1,712,984	1,296,938	—24.3
Total	831		724,663	540,971	—25.4	31,967,182	18,820,526	—41.1

TABLE VII

	Establishments reporting for April and May	Period of pay-roll	Number on pay-roll on		per cent. of incr. (+) or decr. (—)	Amount of pay-roll in		per cent. of incr. (+) or decr. (—)
			15 April 1921	15 May 1921		April 1921	May 1921	
						\$	\$	
Iron and steel	115	½ mon.	112,713	111,101	— 1.4	5,743,075	5,434,846	— 5.4
Automobiles	46	1 wk.	83,556	87,266	+ 4.4	2,665,106	2,921,215	+ 9.6
Car building and repairing	62	½ mon.	45,554	44,027	— 3.4	3,059,184	2,889,152	— 5.6
Cotton mfg.	58	1 wk.	46,590	47,532	+ 2.0	789,374	812,447	+ 2.9
Cotton finishing	17	"	11,986	12,423	+ 3.6	267,574	273,334	+ 2.2
Hosiery and underwear	65	"	24,642	26,316	+ 6.8	407,502	434,879	+ 6.7
Woollen	51	"	43,978	46,465	+ 5.7	1,018,957	1,097,338	+ 7.7
Silk	47	2 wks	18,564	18,957	+ 2.1	840,345	856,269	+ 1.9
Men's clothing	45	1 wk.	27,226	26,098	— 4.1	898,620	767,656	— 14.6
Leather	37	"	11,330	12,000	+ 5.9	260,828	271,777	+ 4.2
Boots and shoes	86	"	55,430	57,432	+ 3.6	1,285,392	1,300,316	+ 1.2
Paper making	59	"	24,630	21,555	— 12.5	613,244	506,943	— 17.3
Cigars	58	"	16,612	16,873	+ 1.6	309,401	325,495	+ 5.2
Coal (bituminous)	97	½ mon.	22,815	22,459	— 1.6	1,291,253	1,308,255	+ 1.3
Total	843		545,626	550,504	+ 0.7	1,944,9855	1,919,9922	— 1.3

The returns of the U. S. A. Employment Service are obtained from 1,428 firms employing, as a rule, more than 500 workers and situated in 65 principal industrial centres. The industries are classified under 14 heads. The following table shows the state of employment at the end of May as compared with the end of the previous month and the end of January 1921.

TABLE VIII

	Number on pay-roll				
	31 Jan.	30 Apr.	31 May	percent. of incr. (+) or decr. (—) compared with	
				April	Jan.
Iron and steel and their products	443,754	353,739	344,958	—2.5	—22.3
Vehicles for land transportation	93,852	174,864	181,474	+3.8	+93.4
Railroad repair shops	63,118	53,616	58,100	+8.4	—7.8
Textiles and their products	223,705	247,137	253,743	+2.7	+13.4
Leather and its finished products	39,385	45,236	47,178	+4.3	+19.8
Paper and printing	52,865	49,693	49,916	+0.4	—5.6
Tobacco manufactures	28,279	27,980	26,438	—5.5	—6.5
Food and kindred products	137,444	125,725	124,810	—0.7	—9.2
Liquors and beverages	1,747	1,660	1,691	+1.9	—3.2
Lumber and its manufacture	24,018	23,496	22,814	—2.9	—5.0
Chemicals and allied products	84,803	76,291	76,186	—0.1	—10.2
Stone, clay, and glass products	15,102	13,921	14,197	+2.0	—6.0
Metals and metal products other than iron and steel	79,664	74,574	74,571	—0.0	—6.4
Miscellaneous industries	340,398	312,817	297,462	—4.9	—12.6
Total	1,628,134	1,580,749	1,573,538	—0.5	—3.4

A comparison of the above table with the previous one exhibits certain discrepancies as between the two sets of returns, clearly due to differences in the industries covered and in the method of grouping them. If, for instance, the miscellaneous group, which does not figure in table VII, is excluded from table VIII, a comparison of the numbers of employees in May with the number in April shows, instead of a decrease of 0.5 per cent., an increase of 0.6 per cent., which approximates to the increase of 0.7 per cent. recorded by the Bureau of Labor Statistics. Taking such of the individual groups as may be held to correspond in the two tables, we find for iron and steel a decrease of 1.4 per cent. in table VII and of 2.5 per cent. in table VIII; for the six textile groups in table VII an increase, when combined, of 2.8 per cent., corresponding to an increase of 2.7 per cent. in the "textiles and their products" group of table VIII; an increase of 4.0 per cent. in the two groups of leather and boots and shoes in the former table, as against one of 4.3 per cent. in the leather group of the latter. On the other hand, there is a marked discrepancy in the percentages for the paper and tobacco groups; paper-making

in table VII shows a decrease of 12.5 per cent., paper and printing in Table VIII an increase of 0.4 per cent. For cigar manufacture there is an increase of 1.6 per cent. in the first table, as against a decrease of 5.5 per cent. for tobacco manufactures in the second.



INDUSTRIAL HYGIENE

Industrial Disability Records as a Source of Sickness Statistics ⁽¹⁾

THE obstacles actually encountered in obtaining morbidity reports for a given population or population groups are well known to vital statisticians. The chief difficulties may be expressed in three statements:—

(1) Only such diseases can be reported as come to the attention of physicians and other diagnosticians. These diseases ordinarily are brought to their attention only at a stage when discomfort, pain, or disability is experienced; in their incipient and latent stages, when they are not noticed even by the individual affected or do not interfere with his normal activities, but when their importance is equally as great or even greater, they are not reported.

(2) Only such cases are reported as are (a) notifiable under the law, and of these (b) only ones that the physician or other reporting agency is willing to report.

(3) Even when the occurrence of an illness is reported, the diagnosis is frequently less accurate than a statement of cause of death. This is inevitably so, for the reasons that the illness itself may be merely a symptom of one or several diseases, that it is not always practicable to apply established tests, and that the individual affected cannot be under sufficiently close observation to obtain the necessary clinical evidence.

Let us examine, for a moment, the possible sources of morbidity data. Keeping in mind the fact that the occurrence of disease in a population, for which certain facts as to race, sex, age, and various environmental conditions can be known, is the goal, we may classify the various sources into three general groups, as follows:—

(1) reports of diseases that are “notifiable” under law, which are made by physicians and other diagnosticians to health authorities ;

(2) disability or sickness records for persons associated into insured groups, for persons employed in certain industrial

(1) Paper by Edgar SYDENSTRICKER and Dean K. BRUNDAGE, U. S. A. Public Health Service, read at the Eighty-second Annual Meeting of the American Statistical Association, and reprinted from the *Quarterly Publication* of that Association, New Series, No. 133, March 1921.

establishments maintaining fairly detailed supervision of the health of their employees, for persons living in various institutions, and in the armed forces of the United States ;

(3) special surveys of observed groups of persons that are made with the specific purpose of obtaining accurate records of the incidence of a given disease; these studies are, of course, researches in their purpose and character.

It will be seen at once that the first source of material mentioned—the reports of certain notifiable diseases which have accumulated in every health department—does not begin to satisfy the elementary requirements for statistics of disease incidence. The reports are by no means complete for any disease, even assuming the diagnosis to be trust worthy. They do not contain accurate or sufficient data regarding conditions under which the disease occurs. The decennial enumeration of the population as to specific occupation, for example, cannot be utilised, and the cases are not reported for any definitely enumerated population from any point of view. The third source of material obviously is of a special kind, and its scope and its usefulness are limited only by the amount of money and time spent and by the ability of those who are making the research. The second group of sources of data, on the other hand, afford at the present time more encouragement of a practical sort for obtaining *current* facts as to disease incidence for a definitely known exposure under a limited number of important conditions than either health department records or the results of special surveys.

In this belief, the attempt is being made by the Statistical Office of the Public Health Service of the U.S.A. to collect current records of disability (exclusive of those due to industrial accidents) occurring among employees of industrial establishments. The project was planned with the assistance of a committee of the American Public Health Association (*). Since very few plants maintain records of specific causes of disability among their employees, it was necessary to utilise records of such sick benefit associations of employees as were willing to conform to a standard system of records and reports. These records show, for each case of disability, the date on which cash benefits commenced (usually the third, fifth, or seventh day of disability), the number of days for which benefits were paid, and the cause of disability as stated on a doctor's certificate. At the present time, about sixty such

(2) The plan for standardised sickness records and reports is contained in the following Public Health Reports :

- (a) *Report of Committee on Industrial Morbidity Statistics*, Reprint No. 484.
- (b) *Continuation Report of the Committee on Industrial Morbidity Statistics*, Reprint No. 564.
- (c) *Sickness Records for Industrial Establishments*, Reprint No. 573.
- (d) *Diseases Prevalent among Steel Workers in a Pennsylvania City*, issue of 31 December 1920.

associations are co-operating with the Public Health Service, although not all of them have made the changes in their method of recording and reporting disabilities that are necessary to conform to either of the "standard" methods suggested by the committee and the Public Health Service. The total membership of these associations at the last report was approximately 250,000; because of reductions in force, the "exposure" will probably be considerably decreased. Two standard methods of recording and reporting disabilities were proposed to industrial establishments and sick benefit associations in order to secure their sickness experience, as well as to assist them in utilising and analysing their own records as a basis for preventive work. (1) One method requires a record of the number of persons considered by sex and occupation (or department within the plant), and a record of every case of disability for which sick benefits are paid, showing the date of onset (i.e. the date on which disability commenced), duration (i.e. the number of days for which sick benefits were paid), diagnosis, and occupation (or department) in which the disabled person is employed. (2) The other plan not only includes the data required in (1), but also contemplates a greater amount of detailed information, such as the age, race, length of time in occupation, etc., for both the persons considered and the cases of disability among such persons. The latter plan requires a rather detailed system of individual cards, and only a few plants are at present in a position to put it into effect.

Although the work of utilising these records, after placing them on either of the so-called standard plans, is still in an experimental stage and the policy of retrenching as much as possible on all expenditures for records is being practised in industrial plants generally at the present time, it is believed that the use of such records can be developed to serve two important purposes: (1) to furnish fairly current information regarding the incidence of disease among a representative group of wage earners in different industries, and (2) to accumulate a mass of data relating to the causes of disability among a large number of adult persons of different race, sex, age, and occupation and industry.

Since the plan has been inaugurated only a few months, the material so far collected is not sufficient to warrant definite conclusions on any of the essential points. The data cannot be presented here in detail, but for purposes of illustration we will call attention to the tables annexed to this article. These tables show the monthly variation in diseases which caused disabilities of seven days or longer in a group of plants during the first eight months of 1920, as well as the incidence of various diseases causing a disability of more than one day during a 12-month period in a large industrial plant.

Taking up first the monthly variations in disease incidence

among the members of certain sick benefit associations of employees in a group of industrial establishments: the number of persons considered varied from 14,208 in January to 62,757 in July, and the number of industrial establishments from 8 in January to 25 in July. The annual incidence rates per 1,000 persons for sicknesses causing inability to work for seven days or longer by months were as follows: January 275, February 327, March 126, April 103, May 77, June 67, July 67, August 54. An extremely wide seasonal variation is thus manifested, the rate for February being approximately six times the rate for August. It will be recalled that the recrudescence of epidemic influenza occurred in the first three months of 1920, particularly in February. In order to find out to what extent the epidemic influenced the seasonal variation in disease incidence, table I was prepared, showing the monthly incidence rates of influenza and grippe in comparison with the rates for the principal disease groups. Cases diagnosed either as influenza or as grippe were combined, because the terms were often used interchangeably in reporting the epidemic.

In the first two months of the year the frequency rate for influenza and grippe, it is seen, was larger than the frequency rate for all other diseases combined; in March, however, the number of new cases of influenza and grippe dropped perceptibly below the rate for all other diseases, and gradually diminished to the negligible incidence of 0.8 cases per 1,000 in July. The occurrence of the epidemic in the months in which sickness ordinarily is heavy accentuated markedly the usual seasonal variation. Even with influenza and grippe eliminated from the sickness rates, disease occurrence was about twice as frequent in winter as in summer⁽³⁾.

When influenza and grippe are subtracted, there still remains a surprisingly high frequency rate of sickness causing disabilities of seven days or longer. In January this rate was 132 new cases per 1,000 persons on an annual basis, and even in August, the month of lowest incidence in the 8-month period, the annual rate was over 50 per 1,000. This is true in spite of the fact that the members of a large proportion of the associations are a selected group⁽⁴⁾.

(3) In regard to the more important diseases and groups of diseases occurring each month, it should be stated that the monthly fluctuations in their incidence, presently to be discussed, were indicated in a general way for each reporting association.

(4) Twelve of the 27 associations specify definite age limits for eligibility to membership, the average limits being from 17 to 55 years of age. In some other respects, too, industrial employees are a distinctly selected group. Temporary or casual labourers are seldom admitted to membership, and some may be too poor to afford the cost of insurance. Women have not the privilege of belonging to some of the reporting associations, and in those reporting associations which do have female members their number is relatively small, so that the sickness rates presented could not be affected to any appreciable extent by the greater frequency of illness among women. Furthermore, not all diseases are included in the tables, as sick benefits are denied for the venereal diseases, and 6 of the 27 reporting associations in this group refuse to pay benefits for chronic

TABLE I. FREQUENCY OF INFLUENZA AND GRIPPE COMPARED WITH THE FREQUENCY OF THE PRINCIPAL DISEASE GROUPS, BY MONTH OF ONSET, JAN. TO AUG. 1920 (1)

Month of onset	Number of associations reporting	Membership	Number of cases per 1,000 persons per year							
			all diseases and conditions	influenza and gripe	other diseases and conditions					
					total	diseases of respiratory system	diseases of digestive system	general diseases (2)	diseases of the nervous system	all other diseases
Jan.	8	14,208	275.0	142.9	132.1	49.9	24.1	20.8	7.5	29.8
Feb.	13	22,249	326.7	201.4	125.3	40.8	22.7	17.5	8.5	35.8
Mar.	14	23,527	126.0	37.1	88.9	21.1	24.1	17.1	8.0	18.6
Apr.	18	30,075	103.4	13.2	90.2	19.4	15.6	16.6	8.0	30.6
May	22	58,302	76.7	4.6	72.1	16.8	15.3	12.2	5.9	21.9
June	25	62,344	67.1	2.3	64.8	9.2	14.1	15.4	5.0	20.7
July	25	62,757	67.3	0.8	66.3	8.1	15.2	8.7	3.8	30.7
Aug.	24	60,304	54.4	1.1	53.3	9.1	13.9	9.4	3.8	17.1

(1) Annual number of cases per 1,000 members of certain sick benefit associations reporting to the Public Health Service. Only cases lasting seven days or longer are included.

(2) Except influenza and gripe.

In lieu of a more satisfactory basis for classifying the diseases, and in accordance with the recommendations of the American Public Health Association's committee, the groupings appearing in the International List of the Causes of Death have been utilised in the tables. On this basis, the outstanding causes of disability are found in the "general" (from 10 to 164 per 1,000), the "respiratory" (from 8 to 50 per 1,000), and the "digestive" (from 14 to 24 per 1,000), these three groups accounting for from 49 to 86 per cent. of all disabilities lasting seven days or longer. The wide fluctuation in the general diseases was caused almost entirely by influenza and gripe. Rheumatism does not show so great a seasonal fluctuation as might have been expected; the rate from this cause was high during the period January to June, showing a slight tendency to become less frequent in July and August. The tuberculosis rate varied between 1 and 3 per 1,000 persons per year, which seems to indicate a relatively slight disability from tuberculosis lasting seven days or longer. It may be offered in explanation that many cases which actually began in the period under consideration probably had not yet reached a stage involving actual incapacity for work.

diseases contracted prior to the date of joining the association. 16 of the associations do not pay for disabilities brought on by the use of intoxicating liquors; 11 decline to pay for disabilities resulting from the violation of any civil law; and 8 for the results of wilful or gross negligence. Just how rigidly these rules are enforced is not known, but, considering these restrictions, the statistics should be regarded as a *minimum* statement of the disabilities actually occurring and lasting seven days or longer.

TABLE II. ANNUAL NUMBER OF CASES OF SICKNESS CAUSING DISABILITY FOR ONE WEEK OR LONGER PER 1,000 MEMBERS OF SICK BENEFIT ASSOCIATIONS IN CERTAIN INDUSTRIAL ESTABLISHMENTS, BY MONTH OF ONSET, JAN. TO AUG. 1920, AND BY DISEASE CAUSING DISABILITY

Disease or condition causing disability with (corresponding title numbers in parentheses from the International List of the Causes of Death)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
All diseases and conditions(1)	275.0	326.7	126.0	103.4	76.7	67.1	67.3	54.4
General diseases	163.7	218.9	54.2	29.8	16.8	18.1	9.5	10.5
Typhoid fever (1)	1.7	—	.5	0.5	0.4	—	0.4	0.6
Influenza and grippe (10)	142.9	201.4	37.1	13.2	4.6	2.3	0.8	1.1
Tuberculosis of the lungs (28)	2.5	1.1	3.0	0.9	0.9	2.3	1.2	1.3
Cancer—all forms (39-46)	—	1.1	0.5	0.9	0.7	—	0.6	0.8
Rheumatism (47, 48)	6.6	6.8	5.5	7.6	5.0	6.7	3.0	3.6
Occupational poisonings (57, 48)	—	—	—	—	—	0.2	—	—
Others (2-9, 11-27, 29-38, 49-56, 59)	10.0	8.5	7.5	6.6	5.2	6.5	3.4	3.2
Diseases of the nervous system	7.5	8.5	8.0	8.0	5.9	5.0	3.8	3.8
Neuralgia and neuritis (73)	4.2	2.8	2.0	0.5	1.7	0.8	1.4	1.3
Cerebral haemorrhage, apoplexy, and paralysis (64-66)	0.8	—	0.5	0.5	0.2	0.2	0.2	—
Insanity (67, 68)	0.8	1.1	1.5	0.5	0.2	0.2	—	0.6
Others (60-63, 69-72, 74)	1.7	2.3	3.0	4.3	1.5	2.3	1.6	1.5
Diseases of the eyes (75)	—	0.6	—	1.9	1.5	1.1	0.4	0.4
Diseases of the ears (76)	—	1.7	1.0	0.5	0.7	0.4	0.2	—
Diseases of the circulatory system	2.5	5.1	4.5	3.3	4.8	2.9	4.0	2.1
Diseases of the heart (77-80)	1.7	2.3	1.0	1.4	1.7	1.1	2.2	1.1
Diseases of the veins (83)	0.8	2.3	2.5	1.4	1.7	1.5	1.4	0.6
Others (81-82, 84-85)	—	0.6	1.0	0.5	1.3	0.4	0.4	0.4
Diseases of the respiratory system	49.9	40.8	21.1	19.4	16.8	9.2	8.1	9.1
Bronchitis (89, 90)	21.6	19.3	12.0	8.5	6.3	3.2	3.8	3.4
Pneumonia (91, 92)	15.8	12.5	2.5	4.7	5.0	1.9	1.6	1.9
Others (86-88, 93-98)	12.5	9.1	6.5	6.1	5.5	4.2	2.6	3.8
Diseases of the digestive system	24.1	22.7	24.1	15.6	15.3	14.1	15.2	13.9
Diseases of the pharynx (100)	15.0	12.5	10.0	7.1	5.5	4.0	3.4	3.4
Diseases of the stomach (102, 103)	4.2	5.1	5.5	3.8	3.1	2.9	4.4	3.6

(1) Except those mentioned in footnote (4) p. 117-118.

TABLE II (cont.)

Disease or condition causing disability (with corresponding title numbers in parentheses from the International List of the Causes of Death)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Diarrhoea and enteritis (105)	1.7	1.1	2.0	—	—	1.3	1.0	1.9
Appendicitis (108)	3.3	2.3	2.5	1.9	2.8	2.5	3.4	3.0
Hernia (109)	—	1.1	1.0	2.4	2.4	2.1	0.8	1.1
Others (99, 101, 106, 107, 110-118)	—	0.6	3.0	0.5	1.5	1.3	2.0	1.1
Diseases of the genito-urinary system	2.5	3.4	0.5	1.4	1.7	1.1	1.4	0.6
Acute nephritis and Bright's disease (119, 120)	2.5	0.6	—	—	—	0.6	—	—
Others (121-133)	—	2.8	0.5	1.4	1.7	0.4	1.4	0.6
The puerperal state	—	—	—	—	—	—	—	—
Diseases of the skin and cellular tissue	5.8	7.4	2.5	5.2	2.2	2.7	4.9	2.5
Furuncle (143)	3.3	3.4	1.5	3.8	0.7	1.3	2.6	0.6
Others (142, 144, 145)	2.5	4.0	1.0	1.4	1.5	1.5	2.2	1.9
Diseases of the bones and organs of locomotion	4.2	1.7	3.0	2.4	3.7	1.7	2.4	2.3
Diseases of the bones (146)	0.8	0.6	—	0.5	0.7	—	0.2	0.4
Diseases of the joints (147)	—	—	1.5	0.5	1.1	0.4	0.8	0.2
Others (148, 149)	3.3	1.1	1.5	1.4	2.0	1.3	1.4	1.7
Senility	—	—	—	—	—	—	—	—
External causes (155-186)	3.3	10.8	2.5	13.2	6.1	7.6	12.1	6.3
Ill defined diseases and conditions (187-189)	11.6	7.4	5.5	5.2	3.3	4.6	5.7	3.2

It is interesting to note that occupational poisonings are almost entirely absent in this list as a cause of disability. Two possible reasons for this fact may be advanced: (a) that poisonings do not ordinarily incapacitate for as long as seven days, and (b) that they are not accurately diagnosed. The group of respiratory diseases, as may be expected, exhibits a marked seasonal fluctuation. This variation is true of each and all of the diseases in this group, the disabilities caused by bronchitis and pneumonia being the outstanding features. The relatively high rate from the digestive diseases in the first three months of the year is accounted for chiefly by diseases of the pharynx, of which tonsillitis is the most important. Disability due to tonsillitis is shown to be astonishingly great. Eliminating pharyngeal affections, the digestive diseases exhibit a fairly constant rate throughout the 8-month period. Seasonal disabilities arising from these causes do not show the anticipated increase in the summer months.

TABLE III. ANNUAL NUMBER OF CASES OF SICKNESS PER 1,000 FOR ALL REPORTING SICK BENEFIT ASSOCIATIONS, AND FOR EACH REPORTING ASSOCIATION HAVING MORE THAN 500 MEMBERS, BY MONTHS, JAN. TO AUG. 1920 ⁽¹⁾

(Where asterisks appear the statistics were not available)

Sick benefit associations	Average membership	Number of cases per 1,000 persons per year							
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
All reporting associations	41,721	275	327	126	118 ⁽²⁾	80 ⁽²⁾	71 ⁽²⁾	74 ⁽²⁾	59 ⁽²⁾
Group I ⁽³⁾	34,936	266	283	118	109	71	67	67	55
A	8,528	170	118	60	45	26	38	36	38
B ⁽⁴⁾	2,890	548	785	252	175	150	119	120	*
C	6,813	*	272	133	102	77	61	75	53
D	4,125	*	*	*	*	108	101	98	72
E	18,671	*	*	*	*	61	52	46	59
F	3,169	*	*	*	*	*	64	48	40
G	5,286	*	*	*	*	59	65	62	17
H	4,301	*	*	*	204	125	130	170	112
Group II ⁽⁵⁾	4,858	362	616	130	120	133	97	101	78
N	879	270	260	148	170	136	70	146	131
O	553	*	461	83	153	43	44	21	21
P	626	527	648	200	151	203	137	39	119
Q	697	328	700	152	157	135	122	101	118
R	1,134	*	*	85	55	94	76	101	51
S	1,193	*	*	*	175	190	97	191	30
T	922	*	*	*	113	111	133	133	95
Others ⁽⁶⁾	1,927	132	338	212	208	145	115	154	92

(1) Includes only those sickness and non-industrial accident cases which caused absence from work for one week or longer.

(2) Rate for all reporting associations from April to August differs from the rate for all diseases shown in table II, because association H, which does not report diagnosis, is included in this table.

(3) Associations which have more than 3,000 members.

(4) Included with the large associations because the membership is nearly 3,000.

(5) Associations which have less than 3,000 members.

(6) Associations which have less than 500 members.

When the frequency rates from all diseases are compared for establishments (see table III), extraordinarily wide differences are shown in every month. In February, for instance, the frequency rate for association A was 118 per 1,000, while for association B it was 785 per 1,000; and in July association H had nearly five times as much sickness as establishment A. It was observed that similar differences appeared in the rates among the smaller associations. These marked differences afford strong reasons for a careful study, not only of the causes of illness in the different plants, but of the conditions which give rise to them. Although it is not the purpose to analyse these differences at this time, since the records for the different associations are not sufficiently comparable with respect to the period covered, the value of statistics of this nature will, it is believed, become more and more manifested as they accumulate.

As an example of the data afforded by records of sickness causing a disability of one day or longer, we give a table (No. IV) of the experience of a rubber manufacturing company

employing 18,000 persons during the year ending 31 October 1920. Although this company endeavours to obtain the diagnosis of each case of illness by requiring employees resuming work after illness to check in through the medical department, there were a large number of unclassified cases. The illnesses for which no diagnoses were recorded, however, were of short duration, the average being less than three working days. It may be assumed, accordingly, that the more serious diseases have been properly classified, and that the unclassified cases probably are mostly colds, headache, constipation, dysmenorrhea, and other conditions that disable for only two or three days. The cases for which no diagnosis was recorded constituted 36 per cent. of the male cases and 42 per cent. of the female cases, and since the difference is slight, it is believed that the comparisons given in table IV of the recorded diseases according to sex are sufficiently accurate for all practical purposes.

This experience shows a frequency rate of sickness, based on reported cases which terminated within the year, of 1,933 per 1,000 among 16,400 male employees on the factory pay-roll (office workers not having been included in the record). This is virtually two cases of disabling sickness per man per year. The rate for the 1,625 female factory workers was considerably higher—2,565 cases per 1,000.

In view of the estimate of 6.9 working days as the average loss of time per person per year, based on the sickness surveys of the Metropolitan Life Insurance Company in 1916 and 1917, it is interesting to find that the number of work days lost in the rubber manufactory during the year ending 31 October 1920 was 9.3 per male employee, and 13.8 per female employee. The average duration of disability was found to be 4.8 working days per male case, and 5.4 working days per female case. The women, therefore, not only were sick oftener, but failed to recover as rapidly as the men.

Considering first the incidence of the principal groups of diseases among persons of different sex, the statistics for this company show that the frequency of incapacitating illness was greater among the females for all disease groups, except diseases of the circulatory system, diseases of the skin, and diseases of the bones, and in each of these three groups the number of female cases was not large enough to be conclusive, but only suggestive of the possibility that a larger number of cases might show the same results. The severity of disease as measured by the days lost per case was greater among the females for each principal disease group, except diseases of the nervous system, non-industrial accidents, and diseases of the genito-urinary system. The comparatively short duration of disease of the genito-urinary system among the females is accounted for by the large number of cases and brief duration of dysmenorrhea.

But what specific diseases and conditions were most preval-

ent among the rubber workers under consideration? The most frequent cause of disability among the males was "excessive colds", for which the case rate was 196 per 1,000. Though severe colds were more frequent among the females than among the males, colds were not the first cause of disability among the women employees. Tonsillitis, with a rate of 239 cases per 1,000, was the most frequent cause of female inability to work. There were 388 cases of tonsillitis among 1,625 women, causing an absence of 6.3 days per case, and a day and a half of lost time per woman per year. Severe colds among the men incapacitated on the average for 3.3 working days, causing a loss of 0.7 of a day per man per year. Among the women hard colds caused an average disability of 3.9 working days per case and 0.9 of a working day per person per year. Influenza and grippe ranked second in point of frequency among the males, and third among the females. 2,827 male cases averaged 7.2 working days lost, and 293 female cases 8.2 working days lost. Dysmenorrhea was the fourth greatest cause of disability among the women, causing an absence of 2.6 working days per case.

Other interesting sex comparisons might be cited. Headache, for example, was only slightly more frequent among females than among males. The women were not attacked by bronchitis as frequently as were the men, and their rate for constipation was only one-third of the male rate. The female rate for rheumatism was less than the male rate, and the frequency of boils (furuncle) was only one-seventh of the male rate for this cause of incapacity for work. The women had neuralgia and neuritis more often than the men, and also diseases of the eyes; but men had more diseases of the circulatory system, possibly partly for the reason that a larger proportion were in the older ages. Other points will doubtless suggest themselves to those who desire to examine the table in greater detail.

The tables here presented are merely samples of the material which is afforded in the records of industrial establishments. It is obvious that they are not so complete or so accurate as may be desired, but it is believed that they constitute a definite advance over the fragmentary data available from health departments. It is believed also that when the data are collected in a large mass, for a longer period, and in greater detail for persons of different occupational status, race, sex, and age, they will afford the first considerable body of dependable material for the use of the statistician in the study of disease incidence as well as for the student of industrial hygiene in its broader aspects. Certainly the employer who desires to know definitely how he can improve most effectively the health of his workers will be aided not only by a more careful scrutiny of his own records, when they are intelligently tabulated and analysed, but by the accumulated experience of other plants.

TABLE IV. PREVALENCE OF DISABLING DISEASES AMONG EMPLOYEES OF A LARGE RUBBER COMPANY DURING THE YEAR ENDING 31 OCT. 1920

(Based on reported cases which caused absence from work for one day or longer and which terminated within the year)

Disease or condition causing disability (with corresponding title numbers in parentheses from the International List of the Causes of Death)	Cases per 1,000		Days lost per case		Days lost per person	
	males	fe- males	males	fe- males	males	fe- males
All diseases and conditions	1,933.0	2,565.3	4.81	5.38	9.30	13.80
I. General diseases	275.1	297.2	9.79	12.16	2.69	3.61
Typhoid fever (1)	0.5	—	41.25	—	0.02	—
Malaria (4)	1.5	4.3	5.04	4.57	0.01	0.02
Smallpox (5)	3.0	3.7	13.61	12.00	0.04	0.04
Measles (6)	9.9	14.7	11.81	16.29	0.12	0.24
Scarlet fever (7)	7.8	16.0	18.47	28.77	0.14	0.46
Diphtheria and croup (9)	1.0	5.5	7.94	6.33	0.01	0.04
Influenza and grippe (10)	172.5	180.2	7.21	8.22	1.24	1.48
Dysentery (14)	2.6	2.5	2.21	3.50	—	0.01
Erysipelas (18)	1.5	3.1	17.80	17.40	0.03	0.05
Mumps (19)	18.5	14.8	10.06	11.96	0.19	0.18
Chicken pox (19)	0.6	0.6	8.90	5.00	—	—
Infections (20)	9.6	15.4	7.73	5.60	0.07	0.09
Tuberculosis of the lungs (28)	2.6	2.5	60.86	235.25	0.16	0.58
Acute miliary tuberculosis (29)	2.0	2.5	47.94	36.00	0.10	0.09
Tuberculosis of the other organs (30-35)	0.4	—	38.00	—	0.01	—
Syphilis (37)	1.8	3.1	24.13	30.00	0.05	0.09
Gonococcus infection (38)	6.1	3.1	9.72	14.60	0.06	0.04
Cancer—all forms (39-46)	1.0	—	54.50	—	0.05	—
Rheumatism (47-48)	31.1	24.0	10.73	7.46	0.33	0.18
Diabetes (50)	0.2	—	59.25	—	0.02	—
Exophthalmic goitre (51)	0.2	0.6	45.00	16.00	0.01	0.01
Anæmia (54)	0.5	—	70.13	—	0.03	—
Alcoholism (56)	0.2	—	3.33	—	—	—
Chronic poisonings (57-59)	—	—	—	—	—	—
Other general diseases	—	0.6	—	16.00	—	0.01
II. Diseases of the Nervous System	36.2	40.0	7.67	7.06	0.28	0.28
Cerebral hæmorrhage, apoplexy, and paralysis (64-66)	—	—	—	—	—	—
Mental alienation (67-68)	0.4	0.6	22.84	6.00	0.01	—
Epilepsy (69)	0.4	—	6.29	—	—	—
Chorea (72)	—	1.2	—	7.50	—	0.01
Neuralgia and neuritis (73)	6.8	12.3	5.71	5.65	0.04	0.07
Sciatica (73)	1.8	1.2	22.24	30.50	0.04	0.04
Other diseases of the nervous system	—	—	29.00	—	—	—
Diseases of the eyes (75)	13.7	16.7	5.09	4.52	0.07	0.07
Diseases of the ears (76)	13.1	8.0	8.94	10.92	0.12	0.09
III. Diseases of the circulatory system	12.2	9.1	9.05	26.47	0.11	0.24
Endocarditis and other organic heart diseases (78, 79)	1.3	1.8	17.50	90.33	0.02	0.17
Hæmorrhoids (83)	5.2	1.2	7.92	11.50	0.04	0.01
Other diseases of the veins (83)	0.5	1.2	11.13	17.50	0.01	0.02
Other diseases of the circulatory system	5.2	4.9	7.82	8.50	0.04	0.04

TABLE IV. (cont.)

Disease or condition causing disability (with corresponding title numbers in parentheses from the International List of the Causes of Death)	Cases per 1,000		Days lost per case		Days lost per person	
	males	fe- males	males	fe- males	males	fe- males
IV. Diseases of the respiratory system	279.2	314.4	4.59	6.17	1.28	1.94
Excessive colds (86)	195.8	219.0	3.31	3.91	0.65	0.86
Other diseases of the nasal fossae (86)	20.7	26.5	3.73	4.35	0.08	0.12
Diseases of the larynx (87)	5.2	6.8	3.41	6.45	0.02	0.04
Bronchitis (89, 90)	43.1	37.5	7.95	16.18	0.24	0.61
Pneumonia (91, 92)	6.2	11.7	14.98	20.79	0.09	0.24
Pleurisy (93)	6.8	11.7	9.24	6.00	0.06	0.07
Asthma (96)	1.2	0.6	30.65	2.00	0.04	—
Other diseases of the respiratory system	0.2	0.6	12.00	3.00	—	—
V. Diseases of the digestive system	394.3	422.2	4.51	5.68	1.78	2.40
Diseases of the mouth (99)	12.9	23.4	3.63	5.95	0.05	0.14
Tonsillitis (100)	171.7	238.8	4.99	6.29	0.86	1.50
Other diseases of the pharynx (100)	19.5	4.3	3.09	2.86	0.06	0.01
Ulcer of the stomach (102)	0.4	0.6	31.43	6.00	0.01	—
Other diseases of the stomach (103)	84.1	68.3	3.20	3.80	0.27	0.26
Diarrhoea and enteritis (105)	26.7	25.2	3.03	3.07	0.08	0.08
Appendicitis and typhlitis (108)	11.2	13.6	14.79	16.18	0.16	0.22
Hernia (109)	4.1	1.8	21.93	12.33	0.09	0.02
Constipation (110)	37.3	12.3	2.56	2.10	0.10	0.03
Other diseases of intestines (110)	24.5	30.2	3.24	3.18	0.08	0.10
Biliary calculi (114)	0.2	0.6	7.33	3.00	—	—
Other diseases of the digestive system	1.7	3.1	10.57	13.00	0.02	0.04
VI. Diseases of genito-urinary system	5.4	190.1	14.35	5.71	0.08	1.09
Nephritis and Bright's disease (119, 120)	0.8	5.5	28.21	56.56	0.02	0.31
Diseases of the bladder (124)	1.2	7.4	5.68	4.08	0.01	0.03
Diseases of the testicles (127)	2.7	—	7.38	—	0.02	—
Uterine haemorrhage (128)	—	12.3	—	16.70	—	0.21
Dysmenorrhea (130)	—	151.4	—	2.58	—	0.39
Other diseases of female genitals	—	13.5	—	10.82	—	0.15
Other diseases of genito-urinary system	0.7	—	40.18	—	0.03	—
VII. The puerperal state	—	16.6	—	24.93	—	0.42
VIII. Diseases of the skin	51.5	25.8	5.62	6.38	0.29	0.16
Gangrene (142)	0.1	0.6	4.00	4.00	—	—
Furuncle (143)	27.4	3.7	4.79	3.50	0.13	0.01
Acute abscess (144)	5.2	9.9	8.93	6.94	0.05	0.07
Rash-benzine (145)	5.1	2.5	7.48	4.00	0.04	0.01
Other diseases of the skin	13.7	9.1	5.34	7.73	0.07	0.07
IX. Diseases of the bones and organs of locomotion	41.1	22.7	5.10	6.24	0.21	0.14
Diseases of the bones (146)	1.2	0.6	10.79	55.00	0.01	0.03
Diseases of the joints (147)	0.8	0.6	7.15	7.00	0.01	0.01
Lumbago (149)	13.2	3.7	5.43	8.00	0.07	0.03
Myalgia (149)	20.5	14.8	4.12	4.08	0.09	0.06
Flat feet (149)	4.6	1.8	7.08	6.00	0.03	0.01
Other diseases of the bones and organs of locomotion	0.8	1.2	3.14	2.50	—	—
XII. Senility	—	—	147.00	—	0.01	—

Disease or condition causing disability (with corresponding title numbers in parentheses from the International List of the Causes of Death)	Cases per 1,000		Days lost per case		Days lost per person	
	males	fe- males	males	fe- males	males	fe- males
XIII. External causes	45.6	48.6	7.52	6.81	0.34	0.33
Poisoning by food or drugs (164)	0.4	3.7	5.20	6.83	—	0.02
Fractures (185)	0.9	2.5	23.27	23.75	0.02	0.06
Other injuries (186)	44.3	42.4	7.21	5.83	0.32	0.25
XIV. Ill defined	792.4	1178.6	2.82	2.71	2.23	3.19
Headache (2 189)	87.4	94.8	2.63	3.20	0.23	0.30
Others	705.0	1083.8	2.84	2.66	2.00	2.89

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INDUSTRIAL SAFETY AND ACCIDENTS

The American National Safety Codes Committee

MUCH progress has recently been made by the United States in the preparation of safety codes. These safety codes have been established by States and municipalities or by groups of manufacturers or insurance companies. The safety codes are an attempt to standardise the minimum provisions to be made in order to ensure safety in certain industries or in connection with certain types of machinery or apparatus. The rapid growth of the safety movement has, however, involved some danger of overlapping and duplication in the preparation of codes by different organisations acting independently. For example, many large interests, or groups of interests, have established standards of their own and are following them. During the war the Bureau of Standards co-operated with the safety engineers of the Navy and War Departments in the preparation of a set of safety standards to be applied in government establishments. There has recently been organised the Electrical Safety Conference, in which electrical manufacturers are associated with insurance interests and the Bureau of Standards, and the purpose of which is the development and adoption of safety standards for the construction, test, application and installation of electrical appliances and the orderly and consistent development of safety practices in electrical manufacture and installations. The boiler code of the American Society of Mechanical Engineers is a good example of standardisation by a group of interests.

The need for a central agency, through which these attempts at standardisation could be cleared, soon became manifest, but the method of procedure to set up such an agency was a problem which had to be worked out. Various organisations, including the technical societies, the International Association of Industrial Accident Boards and Commissions, and the Bureau of Standards, were suggested as the proper agencies jointly to co-ordinate the efforts of the many organisations engaged in standardisation of safety

practices. In order to crystallise opinion as to how this work of co-ordination should be carried out, the Bureau of Standards invited delegates from Federal, State, and municipal departments, engineering and utility associations, organisations of insurance companies, and employers, employees, and manufacturers to attend a conference at Washington on 15 January 1919.

FIRST CONFERENCE ON INDUSTRIAL SAFETY CODES

At this conference the organisation, purposes, and plan of procedure of the American Engineering Standards Committee were explained and a proposal made to place the standardisation of safety practices under the auspices and rules of procedure of this body. Briefly summarised, the rules of procedure of this organisation are as follows.

(a) A standard (or code) is assigned by the American Engineering Standards Committee to a "sponsor body", which is any national organisation capable of carrying out the work, and which may, or may not, be a member of the Standards Committee.

(b) The sponsor body appoints a thoroughly representative "sectional committee", subject to approval by the American Engineering Standards Committee.

(c) The sectional committee prepares the standard (or code) and submits it to the sponsor body, which then submits the standard with its approval to the Standards Committee.

(d) It is then published by the sponsor body, and, on approval by the Standards Committee, is labelled "American standard".

This procedure was given approval by the conference, but attention was called to the fact that the American Engineering Standards Committee was representative of, and responsible to, the founder societies only, i.e. to the five national engineering societies and the three government departments (Commerce, War, and Navy), and that the sponsor bodies had no voice in the selection of the members of the Standards Committee or in the preparation or amendment of its constitution and rules of procedure.

This conference directed that the question of the plan of procedure by which the safety codes were to be formulated be submitted to letter ballot of all the bodies represented at the conference and to such others as should properly be included. This conference also directed that another conference be held to consider the vote and to take final action. The result of the mail vote was a substantial majority in favour of the plan to place the work of preparing safety codes under the rules of procedure of the American Engineering

Standards Committee, the plans for the reorganisation of which, to admit to its membership organisations other than the original engineering societies and government Departments, were then under consideration. These plans have been carried through, and the membership of the American Engineering Standards Committee enlarged. It now includes the National Safety Council and insurance interests.

SECOND CONFERENCE ON SAFETY CODES

With the submission of the report of the balloting, the Bureau of Standards issued a call, in conformity with the wishes of the first conference, for a second conference to be held on 8 December 1919, to consider the procedure which should be followed in further work on safety codes and to discuss methods of securing the co-operation of engineering societies, government Departments, and other agencies that are actively concerned with safety work. Representatives in attendance upon this conference discussed in some detail the reorganisation of the American Engineering Standards Committee. The result of the mail ballot referred to previously was affirmed. The conference then proceeded to a discussion of the best method of organising the work, in order that it could be given detailed and continuing attention. It was the consensus of opinion that a special committee on safety codes, acting as a sub-committee of the American Engineering Standards Committee, should be appointed. This attitude of the conference was expressed in the following resolution:

Resolved, (1) that the American Engineering Standards Committee be asked to request the International Association of Industrial Accident Boards and Commissions, the Bureau of Standards, and the National Safety Council to organise a Joint Committee on safety codes, this Committee to include representatives of these bodies and such others as they may consider advisable; (2) that this Joint Committee report on safety codes required, priority of consideration of the codes, and sponsor bodies for their preparation; (3) that this report be put in writing and placed in the hands of the American Engineering Standards Committee not later than 1 February 1920.

In compliance with this resolution, the American Engineering Standards Committee requested these organisations to appoint a Joint Committee on safety codes.

The organisations represented on the National Safety Codes Committee are as follows:

The Liberty Mutual Insurance Co.
Pennsylvania Department of Labor and Industry
Committee on Standardisation and Technical Development, National
Safety Council
Committee on Accident Prevention, National Electric Light Association
Wisconsin Industrial Commission
Ohio Industrial Commission
Bureau of Standards
Bureau of Labor Statistics
New York Industrial Commission

Underwriters' Laboratories, New York City
 Safety Institute of America
 American Society of Mechanical Engineers
 New Jersey Department of Labor
 National Workmen's Compensation Service Bureau
 National Safety Council
 California Industrial Accident Commission

At the first meeting of the Committee, held on 9 January 1920 at the Bureau of Standards, 37 codes were discussed, some of which were codes which had already been completed or on which work was already in progress. Sponsorships for these codes were further considered at a meeting in New York on 17 February, the Committee having made a careful investigation as to the qualifications of and the scope of the work covered by the sponsors which had previously been suggested. The first report of the Committee, which contained definite recommendations for sponsorships for 35 codes, was submitted to the American Engineering Standards Committee on 6 March 1920, and was considered by the Committee at a subsequent meeting on 3 April.

Following the meeting of the American Engineering Standards Committee on 3 April, the National Safety Codes Committee continued its consideration of safety standards for other industrial fields. It has been the purpose of the Committee to suggest as sponsors only those organisations which are able to give the work immediate and continuing attention and which will have the co-operation of all concerned. This necessitated a great deal of travelling and correspondence by representatives of the Committee. At a third meeting of the Committee, on 22 May, recommendations for sponsors for five additional codes were made. A third report was prepared and presented to the American Engineering Standards Committee on 5 June.

The subjects of the codes for which arrangements have been completed, together with the organisations which have been designated by the Committee to act as sponsors and who have accepted such responsibility, are as follows:

Abrasive wheels: The Grinding Wheel Manufacturers of the United States and Canada, and the International Association of Industrial Accident Boards and Commissions.

National electrical (fire) code: National Fire Protection Association.

National electrical safety code: Bureau of Standards.

Power presses: National Safety Council.

Manufacture, transportation, and use of explosives: The Institute of Makers of Explosives.

Foundries: American Foundrymen's Association and the National Founders' Association.

Gas safety code: Bureau of Standards and the American Gas Association.

Head and eye protection: Bureau of Standards.

Paper and pulp mills: National Safety Council.

Mechanical refrigeration: American Society of Refrigerating Engineers.

Stairways, fire escapes, and other exits: National Fire Protection Association.

Woodworking machinery: The International Association of Industrial

Accident Boards and Commissions and the National Workmen's Compensation Service Bureau.

Industrial lighting: Illuminating Engineering Society.

Industrial sanitation: U.S. Public Health Service.

Lighting protection: Bureau of Standards and the American Institute of Electrical Engineers.

The following is the list of additional codes which have been submitted to the American Engineering Standards Committee with a recommendation for sponsorship, or which are under active consideration by the National Safety Codes Committee:

- Locomotive boilers
- Boiler-room equipment and operation
- Conveyors and conveying machinery
- Cranes, derricks, and hoists
- Electricity in mines
- Elevators and escalators
- Internal-combustion engines
- Engine-room equipment and operation
- Steam engines and turbines
- Ladders
- Aeronautic
- Heating and ventilation
- Stationary steam boilers
- Construction work
- Combination of electrical fire and safety code
- Mechanical transmission of power
- Industrial power control
- Nonfired-pressure vessels
- Tanneries
- Blast-furnaces and steel works
- Rolling-mills
- Floor openings, railings, and toe boards
- Logging operations and sawmill machinery
- Machine tools
- Textiles

Before beginning work on a new code or the revision of an old one, the sponsor body must appoint a sectional committee whose membership comprises not only representatives of the sponsor body but also representatives of all other interests concerned. The organisation of this committee is very important, as it is the instrument upon which the sponsor body largely depends to co-ordinate the efforts of all other organisations which have done any work, or are interested in the work to be done by the sectional committee. It is regarded as important that the sponsor keep closely in touch with the central office of the American Engineering Standards Committee, in order that it may be advised of the standardisation work of all organisations which has a bearing on the subject under consideration.

A number of the sponsors have already appointed their sectional committees and work on the codes has begun. Other sponsor bodies have gathered material and prepared a tentative draft of a code for presentation to, and action by, the sectional committee, as soon as its appointment is announced.

SOCIAL INSURANCE

Social Insurance in Czecho-Slovakia

INTRODUCTION

ON the dismemberment of Austria-Hungary, the Czecho-Slovak Republic did not inherit a complete system of social insurance, but a fragmentary organisation, including certain branches only, such as sickness and accident insurance, together with old-age and invalidity insurance for miners and salaried employees. Czecho-Slovakia is a highly industrialised country and its population consists mainly of manual workers. It was natural, therefore, that some attempt should be made to satisfy the longstanding demands of these workers by completing the existing branches of insurance. What was especially called for was a general system of unemployment, old-age, and invalidity insurance for all workers, together with a modernisation of such branches as already existed; these were antiquated in organisation, and the benefits which they provided were inadequate in view of the rise in the cost of living. For these reasons a thorough reform of the existing branches of insurance was first undertaken, as being the easier and more urgent task, while at the same time the way was prepared for an entire reorganisation and the foundations laid for a future general system of social insurance.

SICKNESS INSURANCE

Sickness insurance was the first branch of insurance to be reformed (1). The Austrian Act of 30 March 1888 was still in force, and its provisions regarding the compulsory nature and the organisation of insurance had remained unmodified

(1) Czecho-Slovak legislation relative to sickness insurance includes the following measures:

- (i) Act of 15 May 1919 (No. 268), amending the Sickness Insurance Acts.
- (ii) Decree of 23 September 1919 (No. 516), for the creation of a Workers' Insurance Department and the extension of the laws on workers' insurance in Slovakia.
- (iii) Act of 22 December 1920 (No. 689), amending certain provisions of the Sickness Insurance Acts.
- (iv) Decree of 21 January 1921 (No. 26), on sickness insurance in Slovakia and Sub-Carpathian Russia.

for thirty years. The system was unsatisfactory for various reasons; agricultural and forestry workers were excluded, the organisation was very complicated, the period of benefit too short, and the amount of benefit too small.

The Czecho-Slovak Act of 15 May 1919 (No. 268), remedied these defects. In the first place, it extended compulsory insurance : (a) to workers in agricultural and forestry undertakings (manual and non-manual) ; (b) to domestic servants in town and country ; (c) to apprentices ; (d) to home workers ⁽²⁾. The Act further introduced voluntary insurance, which covers persons not working for a single employer, such as charwomen, dressmakers working at home, laundresses, etc., and the liberal professions. Voluntary insurance also applies to the members of the families of insured persons, of home workers, and of employers, on condition that such members assist the head of the family, but do not receive a regular money wage.

The Act radically changed the organisation of sickness insurance. Organisation had previously been hampered by the large number of sickness insurance funds ; this occasioned heavy administrative expenses, made state supervision more difficult and uniform working almost impossible. Austrian legislation recognised eight kinds of sickness insurance funds. In 1913 there were in Bohemia, Moravia, and Silesia 289 district sickness insurance funds ; 895 works funds ; 4 building works funds ; 773 funds attached to trade organisations ; 144 mutual benefit societies and apprenticeship funds ; making a total of 2,105 funds in all⁽³⁾. The Act of 15 May 1919 abolished the building works funds and the apprenticeship funds, and left only the works funds, run by trade organisations and mutual benefit societies, which conformed to the special requirements of the Act, particularly as to the number of members ; this number was fixed, for example, for the trade organisations' funds at 400, and for the mutual benefit funds at 1,000. In this way 1,366 funds were abolished in Bohemia, Moravia, and Silesia, and most of their members transferred to the district funds. At the request of the agriculturalists the Act provided for the establishment of special sickness insurance funds for agricultural workers, on condition that there were at least 2,000 persons employed in agriculture and forestry in the district. The period during which sickness benefits are paid was extended from 29 to 39 weeks. The minimum payment for funeral expenses was raised from 60 to 90 kronen. Auditing committees, renewable every two years, were created to supervise the management of such funds and to report to the general meetings.

The social and economic condition of the country neces-

(2) The Act thus covers all wage earners, except those in whose case the practical difficulties of sickness insurance would be very great, e.g. temporary employees.

(3) In 1913 there were also 130 miners' funds, with 130, 290 members.

sitated a further reform of sickness insurance, which was introduced by the Act of 22 December 1920 (No. 689). Besides effecting certain modifications in the organisation of the funds, this Act established thirteen classes of wage earners with thirteen corresponding classes of benefits. Benefits as well as contributions were raised, and of the contributions half was to be paid by the employer and half by the insured person. Among other improvements the Act provided for the payment of sickness benefit to women during the six weeks preceding and the six weeks following confinement, thus embodying the principle of the Washington Convention. Insurance of members of the families of insured persons, which had previously been voluntary, was made compulsory. Insured persons were given the right of free choice among the doctors attached to their insurance fund.

In Slovakia and Sub-Carpathian Russia sickness insurance had been regulated by the Hungarian Act of 1907 (Section XIX); the principles embodied in this Act were similar to those underlying Austrian legislation, but its working was rather different. In Slovakia the working of sickness insurance funds was modified by a Decree of 23 September 1919 (No. 516), and compulsory insurance was extended to the same classes as those to which the Act of 15 May 1919 applies in Bohemia, Moravia, and Silesia; in Sub-Carpathian Russia a similar reform was brought about by a Decree of 21 January 1921 (No. 26). The last Decree also established, for both provinces, the same provisions regarding the scope of insurance, classes of wage earners, contributions, and benefits, as were established in Bohemia, Moravia, and Silesia by the Act of 22 December 1920.

These modifications of the sickness insurance regulations are of great importance in connection with the introduction of a general system of social insurance, as the district sickness insurance funds, which will form the basis of general social insurance, have been greatly strengthened, both by the simplification and consolidation of sickness insurance organisation⁽⁴⁾ and by the extension of sickness insurance to almost all classes of wage earners and their families.

(4) According to information received by the International Labour Office from the Ministry of Social Welfare at Prague, the number of sickness insurance funds in Bohemia, Moravia, and Silesia in 1920 was 420. classified as follows:

- 281 district sickness insurance funds;
- 14 agricultural workers' funds;
- 30 works funds;
- 65 funds attached to trade organisations;
- 30 mutual benefit funds.

In Slovakia and Sub-Carpathian Russia there were 29 district funds, dealing both with sickness and accident insurance. These are not independent funds, but merely branches of the Workers' Insurance Department of Slovakia.

The total number of persons insured against sickness in the Czecho-Slovak Republic in 1920 was 2,206,868.

ACCIDENT INSURANCE

Legislation relating to accident insurance is much more complete than that relating to sickness insurance, if we consider the number of Acts and Decrees in force ⁽⁵⁾.

The task of reform was more complicated, as existing organisation and regulations for accident insurance among miners and railwaymen had to be adapted to the new conditions; administration of this kind of insurance had been centralised for the whole country at Vienna. Besides this it was necessary, as in the case of sickness insurance, to co-ordinate and modernise such insurance in Slovakia and Sub-Carpathian Russia; nor could the duty of laying the foundations for a future general system of all insurance, especially by means of a process of simplification, be forgotten.

From Austria the Czecho-Slovak State inherited a triple organisation of accident insurance, for miners, for railwaymen, and for industrial workers.

For industrial workers the Austrian Act of 28 December 1887 had remained in force, with some subsequent amendments, up to the time of the partition of the Austro-Hungarian Empire. For the employees on state and private railways a special organisation was created at Vienna, under Section 58 of that Act, known as the Accident Insurance Fund of the Austrian Railways, and was the only institution for the purpose in Austria. Miners' insurance was governed by the Mining Code of 23 May 1854 and the Act of 28 July 1889 on miners'

(5) The following is a list of accident insurance measures :

- (i) Act of 10 April 1919 (No. 207), amending the law relating to insurance against industrial accidents.
- (ii) Decree of 19 May 1919 (No. 272), applying the Act of 10 April 1919 to railway workers.
- (iii) Decree of 19 May 1919 (No. 356), supplementing the provisions for the application of the Act of 10 April 1919.
- (iv) Decree of 23 September 1919 (No. 516), creating a Workers' Insurance Department in Slovakia.
- (v) Act of 29 October 1919 (No. 606), relating to the cost of living allowances to be added to accident benefits.
- (vi) Decree of 18 November 1919 (No. 612), relating to the classification, according to the degree of hazard involved, of undertakings subject to compulsory insurance.
- (vii) Decree of 17 December 1919 (No. 665), relating to the classification of mines according to the degree of hazard involved.
- (viii) Decree of 30 December 1919 (No. 19 of the Collection of Acts and Decrees for the Year 1920), supplementing the provisions for the application of the Act of 10 April 1919.
- (ix) Decree of 30 March 1920 (No. 182), supplementing the provisions for the application of the Act of 10 April 1919.
- (x) Decree of 3 September 1920 (No. 509), relating to the insurance of workers in Slovakia and Sub-Carpathian Russia against accident.
- (xi) Decree of 3 September 1920 (No. 568), fixing the amount of contributions payable to the Workers' Insurance Department in Slovakia.

funds. This legislation did not establish special accident insurance for miners, but a small periodical payment or benefit was provided in case of sickness, accident, or invalidity. It was only by the Decree of 7 April 1914 that a system of accident insurance similar to that which already existed for other workers was instituted for miners. They were not, however, included in the existing system of insurance funds, but a special organisation was created for the whole of Austria, with one central fund at Vienna. This centralisation of the insurance of railwaymen and miners occasioned great delay in the settlement of claims, which were dealt with on too rigid lines.

This system has been profoundly modified by Czechoslovak legislation. By the Act of 10 April 1919 (No. 207) legislation in force regarding accident insurance for miners was repealed. Miners were included in the general system of accident insurance which was to be administered by the accident insurance funds at Prague and Brno. The organisation of the general system of accident insurance has been greatly simplified by the incorporation of miners' accident insurance; it has been decentralised by the establishment of several funds and tribunals in place of the former centralised organisation in Vienna.

The same principles were adopted in regulating railwaymen's accident insurance. By the Act of 16 April 1919 (No. 207), the Decree of 19 May 1919 (No. 272), and the Decree of 30 March 1920 (No. 182), the administration and control of railwaymen's insurance was absorbed by the general accident insurance funds established at Prague and Brno. This did not apply to certain great lines, such as the state railways, which have been left to organise their own accident insurance with a view to accelerating procedure and diminishing administrative costs.

Other measures affecting the organisation of accident insurance are the Decree of 18 November 1919 (No. 612), relating to the classification, according to the degree of hazard involved, of establishments subject to compulsory insurance, and the Decree of 17 December 1919 (No. 665), relating to the classification of mines on the same basis. In addition to these radical reforms in organisation, amendments of the law itself have been introduced. The Act of 10 April 1919 (No. 207) raised the maximum wage on which insurance was based, as well as the accident benefit. Funeral benefit was increased, and the period during which an accident may entitle to benefit was extended to one year after the appearance of the effects, but not more than two years after the occurrence, of such accident. A further change in accident benefit was introduced by the Act of 29 October 1919 (No. 606), which fixed the cost of living bonuses to be added to invalidity benefit.

A Decree of 23 September 1919 (No. 516) modified the

working of insurance in the province of Slovakia by creating a Workers' Insurance Department at Bratislava. Benefits and contributions in Slovakia and Sub-Carpathian Russia were increased by the same Decree, also by those of 3 September 1920 (No. 509) and of 3 September 1920 (No. 568).

OLD AGE AND INVALIDITY INSURANCE

In addition to sickness and accident insurance, the insurance system of the former Austro-Hungarian Empire included old age and invalidity insurance, but this was limited to "provisions" for miners and "pensions" for salaried employees.

Pensions for Salaried Employees

Pensions insurance was introduced by the Act of 16 December 1906; it did not apply to manual workers, but only to a certain class of workers in salaried occupations. Its effective working was hampered by the limited number of persons benefited, by its scattered organisation, and by the unfair competition with the Government Pensions Office set up by "substitute offices" and "substitute schemes" granting more favourable terms to employers. The Government Pensions Office for the whole of Austria was established at Vienna, with branches in the chief provincial towns.

The legislation of the Czecho-Slovak Republic ⁽⁶⁾ had therefore two main objects: to improve the organisation and to extend the scope of this form of insurance. The first step was taken by the Act of 20 December 1918 (No. 92), setting up the General Pensions Office at Prague. A fundamental reform in organisation and benefits was introduced by the Act of 5 February 1920 (No. 89), which extended the compulsory nature of insurance. By this measure a great many persons previously exempted from pensions insurance, especially commercial employees, were brought within its scope.

The organisation of this type of insurance has been simplified and put on a sounder basis. In Austria it was so heterogeneous that in 1918, besides the Government Pensions Office,

(6) The following is a list of invalidity and old age insurance measures;

(i) Act of 20 December 1918 (No. 92), setting up the General Pensions Office at Prague.

(ii) Act of 5 February 1920 (No. 89), amending the law relating to invalidity and old age pensions for employees in private firms.

(iii) Decree of 4 May 1920 (No. 342), relating to cost of living bonuses to be added to pensions payable under invalidity and old age insurance.

(iv) Decree of 13 September 1920 (No. 529), dissolving the Committee of the General Pensions Office at Prague.

(v) Decree of 30 December 1920 (No. 693), applying the Act of 5 February 1920 (No. 89).

there were about 800 "substitute offices" and "substitute schemes", which involved great administrative expense, quite apart from the unfair competition already mentioned, and made the supervision of insured persons impossible. The limited number of persons insured in these innumerable institutions led to inefficient administration. It was for this reason that the February Act of 1920 abolished all "substitute schemes" and continued to prohibit the setting up of new "substitute schemes", thus carrying on the principle laid down in an Act of 20 December 1918 (No. 92). The February Act of 1920 further makes the maintenance of existing institutions conditional on a number of strict requirements, guaranteeing to insured persons benefits at least one-fifth higher than those offered by the Government Office.

As a result the majority of the "substitute offices", which have not complied with these requirements, will be abolished. Only about thirty will continue to exist in addition to the Government Office.

The February Act introduced a number of reforms affecting benefits, administration, and the control of the Central Office and "substitute offices". As this Act epitomises existing Czecho-Slovak insurance legislation, it will be well to explain its provisions in detail.

Act of 5 February 1920 (No. 89)

In the first place, the Act extends the scope of compulsory insurance by lowering the age of admission from 18 to 16 years, and abolishing the minimum wage condition. It brings into the insurance scheme all supervising staff in agricultural, forestry, mining, and industrial establishments and all persons employed in commercial establishments, offices, and shops of all kinds, so far as such persons are not solely engaged in specifically manual work. It also establishes classification of insured persons in conformity with present conditions. This sets up sixteen classes, as follows:

Class	1	income not exceeding	900 kronen
"	2	" " "	1,200 "
"	3	" " "	1,800 "
"	4	" " "	2,400 "
"	5	" " "	3,000 "
"	6	" " "	3,600 "
"	7	" " "	4,200 "
"	8	" " "	4,800 "
"	9	" " "	5,400 "
"	10	" " "	6,000 "
"	11	" " "	6,600 "
"	12	" " "	7,200 "
"	13	" " "	7,800 "
"	14	" " "	8,400 "
"	15	" " "	9,000 "
"	16	" over	9,000 "

Every employee who has lost his capacity for work or has attained the age of 65 is entitled to an invalidity pension, which consists of a basic pension with a scale of increases. The basic pension for the first six classes ranges from 180 kronen (Class 1) to 900 kronen (Class 6) per year. For the other classes it is calculated so that to the basic pension of 900 kronen for Class 6 there shall be added, for each month's registration during the so-called waiting period, the sum of 1.50 kronen for Class 7, of 3 kronen for Class 8, of 4.50 kronen for Class 9, and so on. In Class 16 the sum to be added amounts to 15 kronen. The increases in the invalidity pension begin on the expiration of the so-called waiting period, and correspond to one-eighth of the premiums paid after the 120th month of registration. The increase may be as much as 50 per cent. of the basic pension, if the state of health of the beneficiary requires constant attendance by persons outside his family. In addition to widows' pensions and maintenance allowances for legitimate children of a marriage contracted by the insured before commencing to draw pension, a maintenance allowance is now given even for illegitimate children or children of a marriage contracted by the insured while in receipt of pension. Additional maintenance allowances are now paid to the beneficiary for those of his children who have no assured future. The allowance for each child is equal to one-sixth of the basic pension, but the total additions may not exceed 50 per cent. Where in lieu of an annual pension, a lump sum is paid on the death of the insured, the Act entitles the children of the insured to this benefit, if the widow is not herself entitled to it or if she is no longer living. If the insured man leaves neither widow nor orphans, the benefit is paid to his father or mother, if dependent on him. An allowance for funeral expenses, equivalent to one-fourth of the pension received by the deceased, is made to the surviving relatives.

The insurance society may compel the insured to undergo medical treatment with a view to restoring his capacity for work or to preventing further incapacity. During such treatment the payment of the pension may be suspended in whole or in part; one-half of the pension must, however, be paid to the family of the beneficiary. If the beneficiary refuses to undergo medical treatment, payment of the pension may be suspended in whole or in part.

The Act provides that those who cease paying their premiums after 60 months' registration (formerly 120 months) may still preserve their right to a pension equal to the sum which they would have received at the end of 50 months by paying 4 kronen per year as an "acknowledgment fee".

Annual premiums range from 6 kronen for Class 1 to 90 kronen for Class 16. In the first four classes two-thirds of the premium are paid by the employer and one-third by the employee; in the other classes employer and employee

each pay one-half. If the employee's wage is less than 600 kronen per year, or if he is paid in kind, the whole of the premium is paid by the employer.

Insurance is normally effected with the General Pensions Office. While insurance might formerly be freely effected with any insurance society, or be replaced by an equivalent arrangement between employer and employed, the new Act has abolished the latter alternative, and insurance in a society other than the General Pensions Office is subject to a number of strict conditions. All such societies must have a special authorisation from the Ministry of Social Welfare ; in certain cases they must deposit security ; where such a society numbers less than a hundred members, the Act compels it to have a reserve based on actuarial calculations ; employers and employees must have an equal number of representatives on the managing committees of these societies ; further, such societies must belong to the Association of Insurance Societies, which is under the control of the Ministry of Social Welfare.

The Government is authorised to conclude Conventions on a basis of reciprocity with states in which systems of insurance exist similar to that in Czecho-Slovakia.

A special Department has been set up in the General Pensions Office for persons not subject to compulsory insurance, or desiring to secure higher pensions than those provided by the Act.

A Decree of 4 May 1920 (No. 342) provided supplementary cost of living bonuses, to be added to old age, invalidity, and widows' pensions and children's maintenance allowances. A Decree of 13 September 1920 (No. 529) and one of 30 December 1920 (No. 693) are concerned with details of application of the February Act.

Although the reforms introduced by these measures will not be fully enforced until two years after they have become law, their influence had already been felt in 1920. At the end of that year 97,774 persons were insured with the General Pensions Office, as against 56,599 at the end of 1919.

Miners' Insurance

Apart from salaried workers, old age and invalidity insurance only applies to miners. The Austrian Act of 28 July 1889 provided insurance for miners against invalidity arising from accident or old age, but the benefits were not very high. Czecho-Slovak legislation has left the organisation of this branch of insurance practically unaltered, intending to modify it on the introduction of a general system of old age and invalidity insurance, but benefits were increased by an Act of 29 October 1919 (No. 608) and a Decree of 18 May 1920 (No. 357).

UNEMPLOYMENT INSURANCE

No unemployment insurance existed in the former Austro-Hungarian Empire, and this problem is therefore an entirely

new one for the Czecho-Slovak Republic. Since the war unemployment has increased to unheard-of proportions. An insurance Act intended to cope with normal unemployment would have been quite inadequate in face of a state of affairs which, in Czecho-Slovakia, as in every other country, threatened to lead to disaster. Extraordinary measures in the form of special allowances ⁽⁷⁾ were therefore adopted for combating this abnormal state of affairs, while an unemployment insurance Bill was drafted and submitted to the Chamber of Deputies in October 1920. The principal provisions of this Bill are here summarised.

Czecho-Slovak citizens subject to compulsory sickness insurance will be entitled to the state supplementary unemployment allowance, subject to the conditions stipulated by the Act. Employees in state establishments and those under public funds administered by the state, also employees of the state railways, are excluded. Nationals of foreign states will be entitled to the allowance, subject to the same conditions as Czecho-Slovak nationals, provided always that the foreign state adopts parallel legislation and gives reciprocal treatment to Czecho-Slovak nationals.

Members of trade unions whose regulations guarantee unemployment benefit to their members will be entitled to the state allowance, which will be supplementary to the trade union benefit. It will be paid to unemployed persons by the trade unions on behalf of the Treasury at the same time as the union unemployment benefit. Payment of the state allowance will only be made to workers already entitled to unemployment benefit. An unemployed person will only be entitled to the state allowance in respect of a single union, although he may be a member of several.

Trade unions are subject to the following conditions in connection with the payment of the supplementary state allowance.

(1) The only condition of membership of a trade union must be employment in the trade concerned and payment of the required subscription. Unions may, if justified by circumstances, limit their members' rights to the receipt of unemployment benefit and the supplementary state allowance, and regulate their duties accordingly.

(2) A trade union must ascertain from each of its members whether he is a member of any other union, and if so, through which union he wishes to claim the supplementary allowance.

(3) The rules of a union must determine the conditions of payment of unemployment benefit and the consequences which arise in the event of non-payment of subscriptions. Non-payment owing to sickness for a period not exceeding

(7) See *Inter. Lab. Rev.*, Vol. I, No. 3, p. 26, *sqq.*

six months shall not deprive a member of the right to unemployment benefit.

(4) Supplementary state allowances will only be granted if the unemployed person produces a certificate proving that he applied for employment at a public or recognised trade union employment exchange as soon as he lost his job and that he has demanded unemployment relief. Payment will only be continued on the production of a certificate proving that he has presented himself at least three times a week at a public employment exchange or at the place indicated to him by such exchange, unless he has been prevented from doing so for serious reasons.

(5) The executive committee of a trade union shall decide on the granting, suspension, or refusal of unemployment benefit and supplementary allowances on the basis of its rules and regulations.

(6) Unemployment benefit and supplementary state allowances must be charged to a separate account, apart from the general account.

(7) The trade union will be under the supervision of the Ministry of Social Welfare and the Ministry of Finance as regards the administration of supplementary state allowances.

Trade unions wishing to pay the supplementary state allowance to their members must notify the Ministry of Social Welfare, at the same time furnishing a sufficient number of copies of their rules and regulations on unemployment benefit. This stipulation must also be observed when any changes are made in such rules and regulations. Trade unions may only begin the payment of the supplementary state allowance after having obtained the consent of the Minister of Social Welfare. The same provision applies before any alteration in the rules or regulations can be valid. A proposal for decreasing unemployment benefit comes into force on the day on which it is notified to the Ministry of Social Welfare, unless the body concerned should have fixed a different date.

The following persons will not be entitled to the state supplementary unemployment allowance.

(a) Persons who are not entitled to unemployment benefit under the rules of their trade union.

(b) Persons who, although entitled to unemployment benefit under the rules of their trade union, had not been members of the said union for more than three months before ceasing work. If the trade union credits its members with the period during which they have been members of another union, the same rule will apply.

(c) Workers on strike or locked out.

(d) Persons dismissed through their own fault, or who have left work without adequate reasons.

(e) Persons incapacitated for regular employment by physical or mental infirmity.

(f) Persons in receipt of sickness benefit from a benefit society.

(g) Persons whose maintenance during the period of unemployment is assured.

(h) Persons outside the territory of the Czecho-Slovak Republic.

(i) Seasonal workers.

The following will under certain circumstances, lose the right to the state supplementary unemployment allowance :

(a) Any person who has lost the right to unemployment benefit under the rules of his trade union.

(b) Any person who, being capable of doing work which has been offered to him by a public or trade union employment exchange or any other public authority, has refused such work, although the same would not have affected his industrial capacity and was paid for at the rate in force in the district in which it was to be done; if such work is to be done outside the commune in which he lives, he must be given free transport; no unemployed person is obliged to accept work in an establishment in a state of strike or lock-out.

(c) Any person who has refused temporary work of public utility offered to him by the employment exchange, although capable of doing it and although it was not of a character to endanger his vocational capacity and was paid for at the rate in force in the district in which it was to be done, provided that refusal shall have been continued for a period which would have earned him a wage equal to one week's supplementary state allowance.

(d) Any person who has been in receipt of the supplementary state allowance for a total period of four months in the course of a year reckoning from the day on which the allowance was first paid to him, or any person who has received such allowance during any three consecutive months of such year.

(e) Any person who obtains payment of [the state allowance through several unions at the same time.

The allowance is equal to the benefit paid to unemployed persons out of the funds of the trade union. The total of the relief paid by the union and the state allowance must not exceed two-thirds of the wages last received by the unemployed person; any excess will be deducted from the state allowance. If necessary the maximum daily state allowance will be fixed by Decree. In issuing the state allowance, no account is

taken of the first week following the application for unemployment benefit; payment begins on the first Monday after this week.

The Government will be authorised to extend the operation of the proposed Act by Decree to various classes of seasonal workers, and to establish for such workers special conditions for the commencement and duration of the right to the state allowance and its amount.

The Act was voted by the National Assembly in August of this year.

THE SOCIAL INSURANCE CODE

In 1904, 1908, and 1911 the Government of the former Austrian State prepared schemes of social insurance which were intended to combine and modernise the existing systems and add to them old age and invalidity insurance, but these schemes were never carried out. The Czecho-Slovak Republic took up the task, but it had to wait for the result of the census of the population ⁽⁸⁾ to furnish the necessary mathematical basis for a complete code. The census was taken on 15 February 1921, and after the publication of the results by the Statistical Department it will be possible to commence the preparatory actuarial calculations.

During 1920 the Social Institute at Prague convened several conferences of experts and delegates of the various organisations of workers and employers, at which the main lines of procedure for the introduction of this insurance code were discussed. In order to satisfy the workers, the Social Democratic deputies introduced, on 26 October 1920, a Bill prepared by the former Minister of Social Welfare, Dr. Lev Winter. This deals with the general problems and principles of social insurance, especially with the amalgamation of sickness and accident insurance. It ignores for the moment factors dependent on the results of the census.

This very lengthy Bill, which contains 179 sections, has been considered by the Social Policy Committee of the Chamber of Deputies, which on 26 April 1921 resolved to refer it to the Ministry of Social Welfare as a basis for the contemplated re-organisation of insurance, and to recommend the Ministry to appoint a committee of experts and representatives of the parties concerned to prepare a complete draft social insurance code.

(8) The last Austrian census was taken in 1910.

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AGRICULTURE

Control of the Employment of Children in Agriculture in Canada and the United States of America

THE employment of children in agriculture as compared with other branches of industry offers a field for investigation distinctly unique. It is frequently claimed that within limits such employment is not open to criticism, and affords, indeed, a wholesome physical and moral training. It is in the open country and for the most part in the fresh air. There is seldom any temptation to engage children in night work and the hazards for them are less than in industrial occupations. The majority of children engaged in agriculture are working either for their parents or with them, and parental influence and protection, accordingly, are usually present. Perhaps it may be universally granted that the child on the farm is in general more fortunate in every way than the child employed in manufacturing, mining, or trade.

But while in agriculture, if we omit the case of children employed in gangs, there has not been the same glaring need of intervention as has impelled governments to enact factory legislation, still standards of judgment as to legitimate hours, wages, and working conditions vary so widely in different parts of the world and as between different employers, that abuses are of constant occurrence here as elsewhere, and the limitation of children's work in agriculture makes claim for serious consideration.

Approach to the problem has hitherto been made almost wholly through indirect channels. The administration of child labour legislation in industry is made possible by the organisation and extension of factory inspection departments in the various governments. But the administration of a child labour law which regulates the employment of children in agriculture presents more serious difficulties. Agricultural employment

of necessity must be spread over vast areas, and employees, even on one farm, may frequently be found working in widely separated fields. Such conditions make detection and enforcement difficult and costly and are not conducive to efficient inspection. The natural result is that, for the most part, direct legislation regarding the agricultural employment of children has been avoided and reliance for their protection has been placed on the indirect application of other laws.

Such direct legislation, however, is not entirely unknown, and may be cited, for example, in certain of the States of America. In twenty-seven of the forty-eight States the employment of children in any gainful occupation is definitely forbidden during school hours. The age of compulsory school attendance varies, and also the minimum compulsory period for that attendance, and the result of this legislation is that all gainful employment during school hours is forbidden for children under 14 years in one State for one hundred days in the year; in two States for four months; in one State for five months; in five States for six months; in six States for seven months; in two States for eight months; in four States for nine months; and in one other State during the entire school session. It is forbidden for children under 15 years in two States for six months; in one State for seven months; and in one State for seven-and-a-half months. In Oregon gainful employment during school hours is forbidden for children under 16 years for eight months in the year, unless they have completed the eighth grade of the elementary schools.

This general limitation of gainful occupation presents a type of direct legislation for the control of the employment of children; but being dependent upon the terms of the education Acts of the individual States, it must rely for its enforcement partly at least upon them.

Also — a fact of primary importance, and one which is typical of the advantage in protection which is given to children of urban, as compared with those of rural, districts — in eighteen States (including nine of those legislating against gainful employment in general as above) modifications are made in the child labour Acts such that, in their application to agriculture, the employment of children at farm labour is wholly or partially exempted from the prohibition.

The following quotation from the Statutes of Indiana is typical of such exemptions:—

“Be it enacted by the General Assembly of the State of Indiana that no child under the age of fourteen (14) years shall be employed or permitted to work in any gainful occupation other than farm work”⁽¹⁾.

The general position in the States as regards the exemption of agriculture from child labour restrictions is indicated below.

(1) Laws, Industrial Board of Indiana, p.44. H.35, Section I.

TABLE I

<i>Nature of Exemption</i>	<i>Effect</i>
<p>Alabama</p> <p>Exempts agriculture from prohibition of children under 14 working in any gainful occupation.</p>	<p>No restriction outside school hours for any age.</p>
<p>California</p> <p>Exempts employment of minors at agricultural, horticultural, or viticultural labour during time public schools are not in session.</p>	<p>No restriction outside school hours for any age.</p>
<p>Colorado</p> <p>Exempts employment of children in any fruit orchard, garden, field, or farm; but children under 14 working for other than parents must receive permit from the Superintendent of Schools.</p>	<p>No restriction in or outside school hours: this exemption apparently applies to prohibition of employment of children under 14 in gainful occupations during school hours.</p>
<p>Delaware</p> <p>Exempts farm work from prohibited employment under 14.</p>	<p>No restriction for any age.</p>
<p>Indiana</p> <p>Exempts agriculture from prohibition of any gainful occupation under 14.</p>	<p>No restriction for any age outside school hours.</p>
<p>Louisiana</p> <p>Exempts agricultural pursuits from occupations prohibited under 14.</p>	<p>No restriction for any age.</p>
<p>Missouri</p> <p>Exempts agriculture from prohibition of any gainful occupation under 14.</p>	<p>No restriction for any age.</p>
<p>Nevada</p> <p>Exempts agriculture from prohibition of employment for boys under 14 and girls under 16.</p>	<p>No restriction outside school hours.</p>
<p>New Jersey</p> <p>Exempts agricultural pursuits from industries forbidden to children under 14.</p>	<p>No restriction.</p>
<p>New York</p> <p>Permits boys of 12 to gather produce for six hours a day outside school hours. Permits children whose parents are engaged in farming to work for parents outside school hours.</p>	<p>No restriction outside school hours.</p>
<p>North Carolina</p> <p>Exempts farming from child labour law (?).</p>	<p>No restriction.</p>
<p>Pennsylvania</p> <p>Exempts "children employed on the farm" from 14 year prohibition.</p>	<p>No restriction outside school hours.</p>

(2) Ruling of State Child Welfare Commission. Also State Board of Education may prescribe rules under which teachers, principals, and superintendents may excuse non-attendance due to immediate demands of farm in certain seasons of the year.

<i>Nature of Exemption</i>	<i>Effect</i>
Rhode Island Exempts agriculture from occupations prohibited over 14.	No restriction.
Tennessee Exempts agriculture even from provision forbidding employment of children "which interferes with attendance at school".	No regulation in or outside school hours.
Texas Exempts agriculture from occupations prohibited under 15.	No restriction.
Washington Exempts farm work from prohibition for males under 14 and females under 16 without permit.	No restriction.
West Virginia Exempts agriculture from prohibition of any gainful occupation under 14.	No restriction outside school hours.
Wisconsin Exempts agriculture from prohibition of any gainful occupation under 14.	No restriction.

Similarly the child labour Act of the United States, which imposes an excise tax on the products of mines, quarries, mills, canneries, workshops, factories, and manufacturing establishments where children are employed, has no bearing on their employment in agriculture (3).

One other way in which the control of children in agriculture may be effected by direct legislation is in the regulation of hours. But while always an outstanding feature of factory legislation, this method of regulating child labour on farms has to a perhaps surprising extent been disregarded, whilst in some States we find a definite exemption for child farm workers from the legal limitations as to hours of other occupations. The situation is shown in the following analysis.

TABLE II

<i>No. of Hours Children may be employed in Agriculture</i>	<i>Remarks</i>
Alabama No restriction.	Definite exemption from 8-hour day and 48-hour week.

(3) Title XII of the Revenue Act of 1918, Section 1200.

<i>No. of Hours Children may be employed in Agriculture</i>	<i>Remarks</i>
<p style="text-align: center;">Arizona</p> <p>No restriction.</p>	<p>Definite exemption from 8-hour day and 48-hour week.</p>
<p style="text-align: center;">Arkansas</p> <p>8-hour day and 48-hour week under 16 years of age.</p>	<p>Same for all remunerative occupations.</p>
<p style="text-align: center;">California</p> <p>8-hour day and 48-hour week under 16 years of age. From 16 to 18 no restriction.</p>	<p>Same for all gainful occupation. Definite exemption.</p>
<p style="text-align: center;">Connecticut</p> <p>No restriction.</p>	
<p style="text-align: center;">Delaware</p> <p>No restriction.</p>	<p>Definite exemption from 10-hour day and 54-hour week.</p>
<p style="text-align: center;">Florida</p> <p>No restriction.</p>	
<p style="text-align: center;">Georgia</p> <p>No restriction.</p>	
<p style="text-align: center;">Idaho</p> <p>9-hour day and 54-hour week under 16 years of age.</p>	<p>Same for any gainful occupation.</p>
<p style="text-align: center;">Illinois</p> <p>8-hour day and 6-day week under 14 years of age. 8-hour day and 48-hour week under 16 years of age.</p>	<p>Same for any occupation. Same for any gainful occupation.</p>
<p style="text-align: center;">Indiana</p> <p>No restriction.</p>	<p>Definite exemption from 8-hour day and 48-hour week for children under 16; and even from 9-hour day and 54-hour week for children under 16 whose parents consent.</p>
<p style="text-align: center;">Iowa</p> <p>No restriction.</p>	
<p style="text-align: center;">Kansas</p> <p>No restriction.</p>	
<p style="text-align: center;">Kentucky</p> <p>No restriction.</p>	
<p style="text-align: center;">Louisiana</p> <p>No restriction.</p>	<p>Definite exemption from 10-hour day and 60-hour week.</p>

<i>No. of Hours Children may be employed in Agriculture</i>	<i>Remarks</i>
Maine No restriction.	
Maryland No restriction.	
Massachusetts No restriction.	
Michigan No restriction.	
Minnesota 8-hour day and 48-hour week under 16 years of age.	Same for any gainful oc- cupation.
Mississippi No restriction.	
Missouri 8-hour day and 48-hour week under 16 years of age.	Same for any gainful oc- cupation.
Montana No restriction.	
Nebraska 8-hour day and 48-hour week under 16 in beet-fields.	No regulation for other agricultural work.
Nevada No restriction.	Definite exemption from 8-hour day and 48-hour week.
New Hampshire No restriction.	Definite exemption from 11-hour day and 58-hour week.
New Jersey No restriction.	Definite exemption from 7 p.m. to 6 a.m. prohibi- tion clause.
New Mexico No restriction.	
New York 6-hour day for boys over 12 gathering produce outside school hours.	No restriction for other work.
North Carolina No restriction.	
North Dakota 8-hour day and 48-hour week.	Same for any gainful occupation.

<i>No. of Hours Children may be employed in Agriculture</i>	<i>Remarks</i>
<p style="text-align: center;">Ohio</p> <p>No restriction.</p>	
<p style="text-align: center;">Oklahoma</p> <p>No restriction.</p>	<p>Definite exemption from 8-hour day and 48-hour week.</p>
<p style="text-align: center;">Oregon</p> <p>8-hour day under 16 years of age.</p>	<p>Same for any occupation.</p>
<p style="text-align: center;">Pennsylvania</p> <p>9-hour day and 51-hour week, under 16 years of age.</p>	<p>Same for any occupation</p>
<p style="text-align: center;">Rhode Island</p> <p>No restriction.</p>	<p>Definite exemption from 10-hour day and 54-hour week.</p>
<p style="text-align: center;">South Carolina</p> <p>No restriction.</p>	
<p style="text-align: center;">South Dakota</p> <p>No restriction.</p>	<p>Definite exemption from 10-hour day.</p>
<p style="text-align: center;">Tennessee</p> <p>No restriction.</p>	
<p style="text-align: center;">Texas</p> <p>No restriction.</p>	<p>Definite exemption from 10-hour day and 54-hour week.</p>
<p style="text-align: center;">Utah</p> <p>No restriction.</p>	<p>Definite exemption from 8-hour day and 48-hour week.</p>
<p style="text-align: center;">Vermont</p> <p>No restriction.</p>	
<p style="text-align: center;">Virginia</p> <p>No restriction.</p>	
<p style="text-align: center;">Washington</p> <p>No restriction.</p>	
<p style="text-align: center;">West Virginia</p> <p>No restriction.</p>	
<p style="text-align: center;">Wisconsin</p> <p>No restriction.</p>	<p>Definite exemption from 8-hour day and 48-hour week.</p>
<p style="text-align: center;">Wyoming</p> <p>No restriction.</p>	<p>Definite exemption from 9-hour day and 56-hour week.</p>

An example of a State where the hours of the employment of children in agriculture are legally regulated in a direct way is Nebraska. This State, while it does not prohibit children under the minimum age from working in agriculture, regulates the hours of employment for persons under 16 years of age in sugar-beet fields as follows:

No person under the age of sixteen years shall be employed or suffered or permitted to work in any... ..beet field... ..more than forty-eight hours in any one week, nor more than eight hours in any one day, nor before the hour of six o'clock in the morning, nor after the hour of eight o'clock in the evening ⁽⁴⁾.

Arkansas is the only State which includes agriculture in its child labour law restrictions on the same basis as industrial or commercial employment. It provides that no child under 14 may be employed in any remunerative occupation.

Summarising, then, the direct legislation in the United States of America which aims at the control of the employment of children in agriculture, we find in the forty-eight States that twenty-seven prohibit the employment of children in any gainful occupation during school hours; that in ten of these and eight others modifications are made in the child labour laws, such that the employment of children at farm labour is wholly or partially exempted from restriction; that the direct regulation of the hours of children's work in agriculture has received little attention and is provided for by statute in eleven States only; and that one State includes agriculture in its child labour laws on the same basis as other employment ⁽⁵⁾.

In Canada, as in the United States of America, the legal regulation of working conditions rests largely with the Provincial Governments, as distinct from the Federal. In eight out of the nine Canadian Provinces, the minimum age of employment in factories and certain other branches of industry is fixed. In Alberta no child under 15 years may be employed in a factory. In British Columbia the limitation applies to boys under 14 and girls under 15 years (an exception is made here in the case of employment in canning fish, packing fruit, and work incidental thereto, but only during the time of fish runs and in fruit seasons). In Manitoba, New Brunswick, Ontario, Quebec, Saskatchewan, and Nova Scotia the minimum age of industrial employment is 14 years; in Nova Scotia an exception is made in the gathering and preparation prior to cooking of fruits and vegetables for canning; in such case

(4) Nebraska Labor Law, p. 27, 3584, Section 10.

(5) For the summary of the legislation of the United States in the preceding pages, including the two analyses of legislation, we are indebted largely to Dr. John B. Andrews, Secretary of the American Association for Labor Legislation.

the work is to be done in a room separate from that in which cooking, canning, or dessicating is being carried on, and hours are limited to eight in one day and four on Saturday. The Industrial Establishments Act of Quebec requires that no child under 16 years of age may be employed in any industry, trade, or business, if he is unable to read and write readily. Quebec, Manitoba, and Saskatchewan require a certificate of age in the case of children under 16 years employed in industrial occupations, and in Ontario a home permit or employment certificate must be held by any child under 16 years of age who is employed by any person during the hours between 8 a.m. and 5 p.m. This provision of the Adolescent School Attendance Act applies to any employment and evidently includes agriculture.

These are the Canadian laws which protect children in their employment, but, excepting in Ontario, they exercise no direct control in the case of agriculture. In Ontario the Factory, Shop, and Office Building Act as amended in 1919 makes some approach to the problem, in that it provides for the maintenance of certain standards in farm camps in which women and girls are employed. Such camps may be open only between the first of May and the first of November; women and girls may be employed not more than ten hours in one day, unless a different arrangement is made for the sole purpose of giving a shorter day's work on one day of the week; no women or girls may be employed for more than sixty hours in any one week. A suitable matron must be provided and approved standards of conduct and order maintained; the camp must be located on a site providing proper drainage; a suitable building for use as a dining-room and kitchen must be furnished, but between the first of July and the fifteenth of August tents may be used; floors must be provided for tents used for sleeping accommodation except between the fifteenth of June and the fifteenth of August, and there must also be a sufficient number of beds and mattresses, proper facilities for washing, separate privies (which must be kept clean) for every fifteen workers or fraction thereof, a supply of pure drinking water, and sufficient and suitable food with proper facilities for its preparation and serving under sanitary conditions.

This legislation applies where six or more women or girls are employed in agricultural work of a seasonal nature and live in a camp; its purpose is not specifically the control of the employment of children, but girls of all ages benefit by its application; it affords no protection whatever to boys. It is not intended that this Act should apply to regular farm labourers, but only to those who are employed for less than seven months. The administration of this Act is in the hands of the Department of Labour through its regular factory inspectors. It constitutes the only direct legislation found in Canada for the control of the employment of children in farm work.

Difficulties in administration, coupled with the absence of glaring need, have kept governments in general from instituting the same legislative measures for the protection of children in agriculture as in industry, notwithstanding demands from time to time for equal protection⁽⁶⁾. The result is that more and more dependence has been placed upon indirect legislation in order to secure the desired control, and especially upon compulsory school attendance laws, which present relatively few administrative difficulties. For the period during which children are by law required to attend school, their continuous employment in agriculture or any other class of work, with its consequent evils, is immediately prevented, and as the administration of such laws is relatively simple and inexpensive, they can show, in proportion to their undertaking, considerable success.

Legislation for compulsory school attendance recognises the right of the state, in the interests of the education of the child and its future citizenship, to deprive parents or guardians of the benefit of the labour of their children or wards. Such laws set forth the ages between which children shall attend school, and usually the minimum number of days or months of attendance required in each year. Parental responsibility is assumed and penalties provided for the parents or guardians of absentees. Special administrative machinery may be instituted for enforcing the minimum attendance, and in the case of habitual truancy the penalties may extend to the children themselves, a provision, however, which, in so far as it is punitive only, is a last resort and which in actual practice is being interpreted more and more in terms of the constructive possibilities of the situation⁽⁷⁾.

In order to estimate the influence of compulsory school attendance laws on the employment of children in agriculture, it is necessary to note

- (a) the ages of the children included ;
- (b) the length of the minimum school year (the number of days' attendance required in the year) ;
- (c) exemptions, full-time or part-time ;
- (d) the authorities charged with the enforcement of the laws and the efficiency of their work.

In Canada and the United States compulsory school attendance ends at ages varying from 12 to 18, according to the respective standards of the individual Provinces and States, and with corresponding advantage or disadvantage to the children concerned. There is evidence of the disadvantage of the

(6) *Publications* of l'Association internationale pour la protection légale des travailleurs, No. 6, pp. 63-68 and 207.

(7) Two tables will be printed in a subsequent number of the *International Labour Review* giving an analysis of the compulsory school attendance laws of Canada and the United States of America.

rural child in that in Canada the maximum age appears as 12 once only, viz. in New Brunswick, and there applies only to rural districts; in the cities and towns of this Province compulsory education is continued to 16 years. A similar distinction is made in Nova Scotia, where the maximum age in rural districts is 14 and in cities and towns is 16. In Ontario this distinction is not made explicitly by law, but while in Section 9 of the Adolescent School Attendance Act urban municipalities with a population of 5,000 or more are *required* to establish and maintain part-time courses of instruction for adolescents between 14 and 18 years of age, rural municipalities, on the other hand, are only *allowed* to do so if they desire. The practical opportunity for continued education after 14 years may in this way be denied the rural child. This difference of standard as between town and country is found in the United States also, viz. in Louisiana, Kentucky, Maryland, and Nebraska.

The number of days of school attendance required in the year varies even more than the maximum age requirements. In Canada it varies from 120 days to something over 200 days. British Columbia distinguishes city from rural districts and requires ten months' school attendance in the former and six months' in the latter. In the United States this distinction is also sometimes made, e.g. in Nebraska, which varies from the entire session of at least seven months to a minimum of twelve weeks, and Tennessee, which varies from the entire session to eighty days. In Alabama the minimum period of compulsory school attendance each year is one hundred days; in Oklahoma it is three months; in Mississippi it is eighty days. These are the lower standards. But more exacting requirements exist; in fact, the forty-eight States and the District of Columbia require school attendance during periods varying from three to nine months, and seven States have reached the 'nine months' standard.

Further modification of the compulsory element in school attendance laws is found in the authorised exemptions. In general, these exemptions have their basis in the welfare of the child. Sometimes, however, they are economic, and not infrequently they give prominence to the demand for agricultural labour e.g. in Alberta, Manitoba, and Ontario in Canada, and in Georgia, Pennsylvania, and South Dakota in the United States. In other States home employment, which indirectly includes work on the home farm, is also recognised as justification for non-attendance; and special part-time exemptions are authorised.

Finally, the efficacy of compulsory school attendance in the establishment of control over the employment of children is determined by the authorities charged with the enforcement of the laws. Whatever the scope of a law, its value is minimised unless sufficient machinery is provided to put its provisions into effect. The practical results of the compulsory school

attendance laws of Canada and the United States may be in some measure judged by the records of illiteracy, although too much emphasis must not be put upon these figures, in that (a) the age standards of the two countries in the illiteracy census were so different; (b) the census in the United States, from which the figures are copied, was taken in 1910 and that of Canada in 1911, while in the intervening decade the enforcement of school attendance has attained much higher standards ⁽⁸⁾.

Responsibility for the enforcement of school attendance laws ⁽⁹⁾ is generally centred in the local school board of the district, with more or less emphasis placed upon the co-operation of the police. In some instances attendance officers, even when appointed by school boards, are vested with police powers, so far as these are necessary for the execution of their duties. On the whole, however, in democratic countries the tendency is to resent the interference of the police in matters of education, though the juvenile court and its probation officers may be excepted from this resentment.

(8) More recent statistics of illiteracy in the prairie provinces of Canada were compiled in 1916 by the Dominion Bureau of Statistics, and include the percentage of illiteracy of the population of 10 years and over as well as those of 5 years and over. These figures, as given in the table below, show that when computation is made from 10 years instead of from 5 years, there is an average reduction of 37.29 per cent. in the percentage of illiteracy. When children between 5 and 9 years of age are graded as illiterate, the explanation is usually that their school life has not yet begun, and later school attendance will remedy the defect.

Percent. of persons 10 years and over illiterate to whole population in 1916	Manitoba	Saskatchewan	Alberta
total percentage	8.1	7.7	6.4
males only	7.7	6.8	5.8
females only	8.6	9.0	7.4
Percent. of persons 5 years and over illiterate to whole population in 1916			
total percentage	12.9	12.3	10.4

(9) A typical example of the machinery of enforcement provided is found in the School Law of Rhode Island 1919, which reads :

" The machinery of enforcing compulsory attendance centres in the school committee, which is required to take an annual census of children of school age, which has accessible the record of attendance kept by teachers in public schools, and which is required to appoint truant officers to enforce the law under its direction. The immediate agent of the school committee is the truant officer, who has authority to make complaints for violation of the truancy law and to serve legal process, and to visit private schools, to inspect registers, and to require reports of children employed in business and manufacturing establishments. Age and employment certificates must be returned to the school committee when a child leaves employment,

In Canada and the United States the institution of specially appointed attendance officers to co-operate with school boards is generally a well-established fact in cities and large towns. The tendency, however, to overlook the appointment of such officers in rural districts, and to leave the enforcement of the attendance laws there largely to public opinion, with such help as government inspectors may from time to time contribute, has meant that in certain localities serious situations have developed, with the result that governments are giving the matter their more and more earnest consideration and delegating specific authority to attendance officers appointed immediately within their own Departments. This tendency is particularly marked in Canada, where several Provinces have adopted the plan of provincial attendance officers. Such government appointments in no way interfere with the powers of school boards, township councils, etc., to make local appointments, which, indeed, are specifically allowed, and in urban municipalities are required; but they do retain a certain central control for the Provincial Department of Education and tend to secure the enforcement of attendance laws as well in backward, as in more advanced, communities. In Ontario the School Attendance Act 1919 reads (Sections 7 and 8):

Section 7. The Lieutenant-Governor in Council may appoint an officer, to be known as the provincial school attendance officer, whose duty it shall be, under the direction of the Minister, and subject to the regulations, to superintend and direct the enforcement of this Act and in that behalf to perform such duties and exercise such powers as may be prescribed by this Act and the regulations.

Section 8. Where it appears to the Minister that in any territory without municipal organisation or in unsurveyed territory school trustees are not providing accommodation for the children entitled to attend school or have neglected or failed to raise the necessary funds for the establishment and maintenance of a school, or have in other respects failed to comply with *The Public Schools Act* and the regulations, or that the election of trustees has been neglected, and no regular board of trustees is in existence, the Minister may by commission under his hand authorise and direct the Provincial School Attendance Officer to do all things and exercise all powers which may be necessary for the establishment and maintenance of a school, the erection of school buildings and providing accommodation, the opening and conducting of a school, the assessing and levying of all sums of money required for school purposes, and generally whatever may be required for the purpose of establishing, maintaining, and conducting a school in accordance with *The Public Schools Act* and the Regulations, and thereupon the Prov-

unless the child demands his certificate. The school committee thus has available a list of children named in the annual school census, and the record of school attendance of each child in school; the difference between the two indicates a field for work by the truant officer, but his duties include also attention to habitual and occasional truancy by regularly enrolled pupils. The duties of factory inspectors make those state officers auxiliaries in enforcing the school law. Besides enforcing the age and employment-certificate law, factory inspectors are authorised, if doubting the accuracy on any statement in a certificate concerning the age or other qualification of a child, to demand the certificate, and order it cancelled if after investigation it is found that the certificate has been illegally issued."

incial School Attendance Officer shall have and may exercise and perform with regard to all matters set forth in the commission, all the authority, powers and duties vested in, and to be performed by a board of school trustees under *The Public Schools Act* and the Regulations.

Penalties ⁽¹⁰⁾ for the non-enforcement of compulsory school attendance laws constitute another method for securing results. If the government grant for educational purposes in any school district is dependent upon the maintenance of a standard attendance of the children of the district, public opinion as to the value of such attendance may be developed, and where the law includes such a clause, the local authority is encouraged to put forth every effort to secure a high standard; also the desire for profit from the use of child labour on the farms is offset by the financial importance to the taxpayers that the children should be at school.

Examples of this plan are found in the United States. Missouri makes the State grant conditional on the maintenance of an average attendance of fifteen pupils in a school, or an average attendance of sixty per cent. of the school population ⁽¹¹⁾. Similarly the law of Texas reads: "The school must maintain each year that it receives State aid an [attendance record of at least seventy-five per cent." ⁽¹²⁾. In this way local interest in the enforcement of compulsory school attendance laws is stimulated, with satisfactory results.

⁽¹⁰⁾ A typical example of legislation which provides a penalty, where persons are guilty of violating the terms of the school attendance laws, is found in South Dakota, where the Act (Chapter 199, S. L. 1921) reads: "(a) Any person having control of a child of compulsory school age who fails to cause such child to attend school as herein required, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than ten dollars (\$10.00) nor more than fifty (\$50.00) for the first offense. For each subsequent offense he shall be subject to a fine of not less than twenty-five dollars (\$25.00) nor more than one hundred dollars (\$100.00) or imprisonment in the county jail for not less than ten days nor more than thirty days, or both such fine and imprisonment in the discretion of the court, and shall stand committed until such fine and costs are paid. Provided that such fine shall be paid to the county treasurer and by him credited to the school fund of the county in which the convicted person resides. (b) Any county superintendent who shall wilfully neglect to perform his duties as truancy officer; any teacher who shall fail to make prompt reports on attendance and non-attendance as required by law; any person who shall harbour or employ a child of compulsory school age not legally excused during the school term; the members of any school board or board of education that shall wilfully neglect or refuse to provide school facilities for children of their school district for at least eight months during the school year, or that wilfully neglect to perform any other duties enumerated in this Article; any truancy officer who shall wilfully neglect to perform the duties of his office; or any person who shall hamper or hinder a child of compulsory school age from attending a school which meets all legal requirements or who knowingly or wilfully interferes or attempts to interfere with such attendance, shall be guilty of a misdemeanor and shall be subject to the same penalty as parents who violate the requirements of this Article."

(11) *Report of the Commissioner of Education, 1913, p. 905.*

(12) *Report of the Commissioner of Education, 1916, p. 80.*

The protection of children employed in agricultural labour appears as an item on the agenda of the International Labour Conference of 1921, and this brief report has been prepared to show how far progress has been made by the Governments of Canada and the United States in effecting control of this class of employment. The standards established by the Provinces and States within these two countries are widely different, but have developed more or less along the same lines and indicate particularly what may be accomplished by indirect legislation. In the preparation of Draft Conventions relative to the employment of children in agriculture, this existing legislation may be suggestive of possible lines of progress for the future. In general, the administration of compulsory school attendance laws can show the best results, particularly where the central authority retains for itself a measure of control. This central control is frequently most effective when the government grant to the local districts for school purposes is contingent upon the enrolment of every child in the district and the maintenance of a satisfactory attendance record. Its operation is sometimes facilitated by the appointment of central attendance officers, to co-operate with the local authorities in securing results.

BOOK NOTES

OFFICIAL PUBLICATIONS

INTERNATIONAL LABOUR OFFICE

Profit-Sharing and Labour Co-Partnership: the Proposal of the Italian Catholic Party. 15 pp. Studies and Reports, Series B, No. 10. Geneva, 16 June 1921. 10d.

The Bill to establish workers' control in industry, which was introduced in the Italian Chamber on 9 February, was accompanied by the texts of the proposals made by the General Confederation of Labour, the General Confederation of Industry, and the Italian Confederation of Workers, the trade union organisation of the Catholic Party. In a previous *Study* (') the International Labour Office published the texts of schemes put forward by the Government, the General Confederation of Labour, and the employers. To these it now adds the text of the Catholic scheme, preceded by a short account of its origin. This scheme is not restricted to the introduction of workers' control, but also includes detailed proposals for the introduction of profit-sharing by the issue of shares to workers.

CANADA

Ontario.

DEPARTMENT OF AGRICULTURE: *Forty-Second Annual Report of the Ontario Agricultural and Experimental Union, 1920.* 88 pp. Toronto, 1921.

The Ontario Agricultural and Experimental Union may be described as the clearing-house for the Ontario Agricultural College. It is the connecting link between the college and the farmers of the province. The report in question sets forth the results of various experiments in different kinds and types of farming in the province.

CZECHO-SLOVAKIA

NATIONAL ASSEMBLY, PUBLICATIONS OFFICE OF: *Exposé sommaire des travaux législatifs de l'Assemblée nationale tchéco-slovaque dans sa première période après la révolution, 23 octobre 1919—26 mai 1920. (Summary of Legislation of the Czecho-Slovak National Assembly in the first post-Revolution period, 28 October 1919—26 May 1920).* 128 pp., Prague, Pub. Off. of the National Assembly. 1920.

A summary of the principal Acts of general interest passed by the Czecho-Slovak National Assembly. A similar collection will be published after each session of the Assembly with the purpose of "informing all the states of the world of the laws which may have some importance for them". This first issue contains, *inter alia*, a summary of various Acts on agricultural reform, measures against unemployment, the 8-hour day, housing, the relief of disabled soldiers, industrial accidents, sickness insurance, conditions of work and wages in home industries, and other subjects.

(1) Inter. Lab. Off. *Studies and Reports*, Series B, No. 7.

DENMARK

STATISTIKE DEPARTEMENT: *Arbejdsløsheden i Aarene 1915-1919*. (DEPARTMENT OF STATISTICS: *Unemployment 1915-1919*). 82 pp. Copenhagen, 1921.

This publication contains statistics of the amount and percentage of unemployment among trade union members in Denmark during the years 1915 to 1919 inclusive. The statistics are tabulated by months for Copenhagen, towns outside Copenhagen, and for the country as a whole. The figures relate to the number of unemployed at the end of the month, and give also the total number of days lost during the month.

The chief trades covered are bakery and confectionery workers, brewery employees, slaughter-house workers, tobacco and cigar makers, tailors, shoemakers, hatters, barbers and manicurists, bridge builders, masons, masons' helpers, carpenters, shipwrights, joiners, gilders, painters, saddle and upholstery workers, plasterers, saw-mill workers, machinists, brush makers, hide and leather workers, potters, glass workers, stone masons, electro-platers, tinsmiths, iron and metal workers, watch and instrument makers, blacksmiths and machine-tool makers, coremakers, electricians, paper makers, bookbinders, lithographers, typographers, firemen and boiler tenders. Among the general groups of workers included separately are unskilled workers, agricultural labourers, women workers in general, office and clerical assistants, and employees in insurance offices.

FRANCE

MINISTÈRE DU TRAVAIL: *Rapports sur l'application des lois réglementant le travail en 1913*, (MINISTRY OF LABOUR: *Reports on the Administration of Labour Legislation in 1913*). Paris, Imprimerie Nationale, 1920. cxx 91 pp.

This volume would in the ordinary course have appeared late in 1914, but the outbreak of war caused it to be put aside, and it was found impossible to issue it before 1920. In spite of this delay, the reports contained in the volume are of interest, since they deal with the last complete year before the war, and thus furnish an important part of the material for the comparative study of the administration of labour legislation before and after the period of disorder which began in 1914.

Though several Decrees relating to industrial employment were issued in 1913, none of them increased either the number of establishments or the number of persons subject to inspection, most of them being concerned simply with detailed regulations for hygiene in special trades already under supervision (p. v). The 142 inspectors (of whom 18 were women) had under their charge a number of establishments estimated (1) at 513,331 (p. v), employing 4,460,805 persons. This total excludes all mines and quarries and works connected with them (which are under the special mining inspection staff), also the naval and military establishments (which arrange for an internal inspection service), and the omnibus and tramway services, which are regulated only by the Sunday rest law (for the administration of which the Prefects are responsible) (p. vi).

The 142 inspectors paid 211,984 visits in 1913, covering 33.4 per cent. (= 171,354) of the establishments under their charge, which employed 67.1 per cent. of the persons under supervision (p. xv). The number of undertakings visited for the first time since being opened was 25,568 (p. xiii), leaving 56,671 which have never yet been entered; nearly all these employ less than five persons, being mostly small country post offices, smithies, offices, and small commercial establishments (p. xiv). Proceedings were taken in 6,956 cases of contraventions, and only 74 of these ended in acquittal (p. xci).

(1) The number is given approximately, as there is no regular system of notifying the opening and closing of establishments subject to inspection, and the field of operations is too large to be surveyed completely every year (p. vi). The number of establishments reported in 1912 was slightly higher, owing to the inclusion in the official lists of various undertakings which were found in 1913 to have ceased to exist (p. vii).

Undertakings employing women and children received a larger share of attention; 50.2 per cent., employing 79.3 per cent. of the workers in the whole group of such establishments, were visited during the year (pp. xv-xvi). The proportion between girls, boys, men, and women employed in the whole number of commercial and industrial undertakings subject to labour inspection had varied little during the eight years preceding the war, in spite of changes in particular industries (p. xi). In 1913 the number of boys under 18 employed was 352,352 or 7.9 per cent.; of girls under 18, 292,590 or 6.6 per cent., a slight but steady decline being perceptible since 1906; of women over 18, 941,138, or 21.1 per cent., also showing a slight decline, though less steady; of men over 18, 2,874,725 or 64.4 per cent., an increase, on the whole, over earlier years. The industrial establishments considered separately show less variation in the proportions between different ages and sexes. Since 1902, although the total number of persons employed has risen steadily, the ratios have remained constant—18 per cent. of employees under 18 years of age, 25.4 per cent. of women, and 56.6 per cent. of men.

As in former years, various difficulties are reported in connection with the employment of children, especially in the employment of foreign children of tender years. Some 50,000 of these were known to be employed in France in 1913 (70 per cent. Belgian and 24 per cent. Italian) (p. xxiv). Owing to the difficulty of investigating the truth of the statements made by parents or guardians, it was relatively easy to obtain work-cards irregularly from the local mayors for these children (p. xxiv) (*). Foreign children, as well as French children from distant parts of the country, continued to be much sought after by owners of glass works, since the very bad conditions obtaining there and the blind-alley character of the work had for a long time prevented recruiting among families on the spot (pp. xxvi *sqq.*). The Divisional Inspector for Nantes made a special enquiry into this question in his district in 1913 (p. xxvii). Certain very unfavourable statements respecting glass works are quoted from his report. He notes, however, a growing tendency to replace children by adult labour, and still more by machinery, owing to the difficulties of recruiting, and notes that this is always found to be economically advantageous (p. xxx). Only 561 cases of the illegal employment of children under 13 years of age were detected, the textile and clothing trades being proportionately the greatest offenders (p. xxvi). The provision for the medical examination of employed children under 16 to ascertain their fitness for the tasks assigned to them was, as in previous years, reported to be practically useless, since any attempt to apply it was likely to result in the dismissal of the child (p. xxxii). Inspectors, therefore, generally prefer simply to recommend to the employer a change of work in any case of manifest overstrain.

The greater part of the report is devoted to the administration of the legal provisions respecting hours of work. A special difficulty is noted—the absence of any obligation on the part of the employer to observe the hours stated on the time-table which he has adopted and posted up in the works (p. xxxiii) (†). The decision of the Court of Appeal to this effect had for some years before the war constituted a very serious hindrance to the work of inspection, since the only sure way of proving a contravention would be to spend the whole day in an establishment without the knowledge of the manager.

In spite of the time-table difficulty, a considerable number of contraventions of the provisions as to duration of work were proved, 1,544 (mainly in the metal trades) in respect of men, and 2,603 (chiefly in the

(2) The Franco-Italian Agreement of 10 June 1910 (*Bulletin of the International Labour Office* (Basle) Vol. V, 1910, p. 329) prohibited the issue of work-cards for children by mayors unless a consular certificate of age and identity had first been procured. This provision was put into operation by Decree of 19 January 1912, but did not become effective until towards the end of the year, and difficulties were reported in 1913 from districts where there were no Italian consuls.

(3) This difficulty is being removed by degrees; as each special Order is issued under the 8-hour Act of 1919, the affixing and observance of the approved time-table becomes compulsory for the industry to which the Order applies.

textile and clothing trades, all being cases of night work) in respect of women and children (p. xxxvi). The latter figure shows a large increase as compared with 1912, the first year of operation of the Berne Convention. In general, however, the eleven hours' rest each night for women and girls was strictly observed (p. xxxix), comparatively little use being made of permits for its temporary reduction, except in Paris. Regular night work was carried on in only 9,226 establishments in all, mostly in the continuous industries, employing 177,751 workers, most of whom were men, the ten girls and women included being employed in beet-sugar works (pp. xxxviii, xlii). The general feeling among the inspectors seemed to be that even in the continuous industries it would not be impracticable to dispense with the night work of young persons altogether (p. xlii).

Overtime, as distinct from night work, was worked in very many more establishments than in 1912, though the actual cases of overtime (i.e. occasions on which an individual worker was employed beyond the normal hours) were not increased in the same proportion. It was found that cases of overtime worked in the interest of national defence had increased by 419 per cent. over similar cases in 1912; no other type of employment approached this increase, though the manufacture of tins for preserved foods showed a rise of 103 per cent., and that of men's clothing 45 per cent. (p. xlvii).

As regards Sunday rest, a general return has been procured from the Prefects (pp. lxx sqq.), who are responsible for authorising general exemptions. They report that 26,706 establishments had obtained exemptions since the Act came into operation in 1906, and 25,909 of these remained in force at the end of 1913. Of these 25,909, 93 per cent. apply to commercial establishments, of which half are barbers' and hairdressers' shops, where, as a rule, another rest day is given instead of Sunday. Special enquiries in Paris and Lyons show that over 68 per cent. of all commercial and industrial establishments observe the Sunday rest for all employees (p. lxxii), even bakeries having reverted to it by agreement in many cases after trying another plan. About one quarter of the establishments working day and night stop at the week-end.

The amount of Sunday work on grounds of urgency increased considerably in 1913 (p. lxxviii); but it was too often found that workers were employed on Sundays to do ordinary cleaning and repairing of machines and tools; such work is illegal on Sunday (p. lxxix). In all 10,187 contraventions of the weekly rest provisions were detected by the inspectors, and 25,28 ascertained by the police—a slight improvement on 1912 (p. lxxiii). The strict prohibition of the employment of women on all public holidays was a matter of complaint among the workers themselves, who would apparently have preferred that, in case of a public holiday on a Saturday or Monday (e.g. Whitsun), more stress should be laid on the Sunday rest. Otherwise it might happen that the wife was required to work on Sunday to make up for the next day's enforced holiday, whereas the rest of the family would be free on Sunday, but its men might be called on for emergency work on the holiday (p. lxxiii).

Little is said as to the administration of the provisions respecting the health and safety of women and children. The number of contraventions proved was 1,490, including 1,007 cases of machines without guards, and 222 of excessive loads (p. lxxvii). It was not until 14 October that the Decree of 1911 respecting children in glass works⁽⁴⁾ came into operation, so that there had not been time to judge of its operation at the date of the Report (p. xxlviii).

A Report on naval establishments and arsenals by the Director of the Inspection Branch of that service is appended to the general Report on labour inspection (pp. xcvi sqq.). The main point brought out is the need for structural improvements in most naval yards in the interest of the workers' health and comfort (messrooms, cloakrooms, and so on), and for fencing of dangerous places in order to reduce accidents. There were 178 accidents (3 fatal and 10 serious) among 32,695 workers in 1913; but this takes no account of persons employed by contractors for naval work. The

(4) This Decree prohibited the performance of certain operations by children of various ages (*Bulletin of the International Labour Office* (Basle), Vol. VII, 1921, p. 372).

Director remarks on the failure of some local managements to notify accidents in proper form and due time, and also on the serious tendency to make use of overtime and Sunday work without substantial reason.

The volume closes with a series of tables showing by divisions or industries the number of establishments, persons employed, exceptions to various provisions authorised by the inspectors, accidents, and contraventions. Similar tables are given for mines and quarries.

SWEDEN

Législation ouvrière et prévoyance sociale en Suède. Bref résumé publié par ordre du gouvernement suédois à l'occasion de la VIII^{me} session du Conseil d'Administration du Bureau international du Travail à Stockholm en juillet 1921 (Labour Legislation and Social Welfare in Sweden. Brief summary published by order of the Swedish Government on the occasion of the Eighth Session of the Governing Body of the International Labour Office at Stockholm, July 1921). 147 pp. Stockholm, 1921.

This is a handy manual, prepared by order of the Swedish Government, on the outstanding features of social legislation in Sweden. A brief introduction summarises the industrial position of Sweden, and the amount of its natural resources, trade, manufactures, and general economic development. The extent of organisation among its employers and workers is also touched upon; the movement of wages and of the cost of living is reviewed. Among the subjects discussed are factory legislation; sickness, accident, and old age insurance; child welfare; the labour market, including unemployment; conciliation and arbitration of labour disputes by law; housing; the drink question; the co-operative movement; public schools and workers' education; administration of labour legislation.

At the end of the volume is a brief list of references.

UNITED KINGDOM

THE INDUSTRIAL FATIGUE RESEARCH BOARD: Report No. 15, *A statistical Study of Labour Turnover in Munition and other Factories.* 92 pp. London, H. M. Stationery Office, 1921. 3s.

This pamphlet is a report of an enquiry into the labour turnover or the rate of change in the working staff in various factories. The data on which it is based are derived largely from records kept by the Ministry of Munitions during the war and in certain other factories both before and after the war; they are incomplete, but superior to most of those hitherto available. The simplest measure of wastage in a factory is the ratio of those leaving in any particular period to the average number employed in that period. The method used in this study calculates separately the rates of leaving at different times in a worker's service, and so gives a more detailed analysis of the facts than any single measure for the whole labour turnover of a factory. A further analysis is made of the reasons for leaving and of the influence of previous occupation on wastage. An appendix contains specimens of forms for factory records, with suggestions for their use and statistical treatment.

UNITED STATES

FEDERAL BOARD FOR VOCATIONAL EDUCATION: *Industrial Rehabilitation. A statement of policies to be observed in the administration of the Industrial Rehabilitation Act, September 1920.* 48 pp. Washington, 1920. (Industrial Rehabilitation Series, No. 1; Bulletin No. 57).

Industrial Rehabilitation; General Administration and Case Procedure, March 1921. 52 pp. Washington, 1921. (Industrial Rehabilitation Series, No. 2; Bulletin No. 64).

These two *Bulletins* supplement each other, one giving a general statement of policies which the Federal Board for Vocational Education contemplates pursuing in its enforcement of the Industrial Rehabilitation Act of 2 June 1920, the other laying down, as precisely as possible, the administrative rules to be observed by the enforcing officers in the different States in carrying out the provisions of the Act.

The United States Act for the industrial rehabilitation of persons disabled in industry or otherwise is a very comprehensive statute, and constitutes a serious effort on the part of the American Government to care for the increasing number of persons industrially disabled. Unlike the Act for the rehabilitation of ex-service men, this Act is more nearly like the Vocational Education Act, in that responsibility is shared with the States by the annual payment to the latter of certain sums of money in return for an equal appropriation on the part of the State. "The grants of Federal monies are conditional and the acceptance of these grants imposes upon the States specific obligations to expend the money paid over to them in accordance with the provisions of the Act."

In its *Bulletin on General Administration and Case Procedure*, the Federal Board for Vocational Education indicates quite clearly the method of administration proposed, outlines the difficulties which may be expected to arise, and suggests means of meeting such difficulties. Emphasis in general is laid upon the importance of vocational re-education and its place in the general education system, and upon the points of contact with the workmen's compensation boards and other enforcing agencies in the different States.

Indiana.

INDUSTRIAL BOARD, DEPARTMENT OF WOMEN AND CHILDREN: *Laws relating to the Employment of Women and Children and the Federal Tax on the Employment of Child Labour*. 48 pp. 1921.

Contains the text of the 1921 Indiana Labor Act, and also of the provisions of the Federal Revenue Act approved on 24 February 1919, which impose an excise tax of 10 per cent. on the yearly net profits of employers employing children under the age of sixteen to work in any mine, quarry, mill, canner, workshop, factory, or manufacturing establishment, in violation of the Act. In addition, the publication prints the statutory provisions relative to the employment, working hours, and conditions of employment of women in Indiana.

Maryland.

STATE INDUSTRIAL ACCIDENT COMMISSION: *Sixth Annual Report for the year 1 November 1919 to 31 October 1920 inclusive*. 26 pp. Baltimore, Maryland, 1920.

The number of insured employees in the State of Maryland during the year ending 30 November 1920 was 10,219; a total of 53,678 industrial accidents was reported, and the amount paid in awards during the twelve months was \$618,494; for medical expenses, in cases where no claim for compensation is payable, \$253,047; and outstanding for future payment of awards made during the year, \$481,947; making a total paid to beneficiaries under the Act and outstanding for future payment of \$ 1,353,488.

Michigan.

DEPARTMENT OF LABOR: *Thirty-seventh Annual Report of the Department of Labor of the State of Michigan*. 547 pp. Lansing, Michigan 1920.

Comprised within this volume are the reports of the factory and workshop inspectors; mercantile store, hotel, and restaurant inspectors; coal mine inspectors; Michigan free Employment Bureau; and boat inspectors.

Pennsylvania.

DEPARTMENT OF LABOR AND INDUSTRY: *Report of Activities of Bureau of Rehabilitation to January 1921*. 38 pp., plates. Harrisburg, 1921. *Bulletin*, Vol. VIII, Series 1921, No. 2.

Recounts the work of the Bureau of Rehabilitation created under the Pennsylvania Act of 18 July 1919. "The aim of the Pennsylvania Rehabilitation programme is... to render workers disabled in industrial and agricultural pursuits capable of earning a living at tasks they can perform without undue injury or health hazard; where advancement is possible; where competition with great numbers of other handicaps will not exist; where

their disabilities will not render them likely to lose their employment in the event of a great supply of able-bodied labour; and preferably at tasks for which they have a natural aptitude or prior experience to reinforce training for the work in which they are placed".

NON-OFFICIAL PUBLICATIONS

ARLT, Ilse. *Die Grundlagen der Fürsorge (The Foundations of Welfare Work)*. 168 pp. Vienna, Oesterreichischer Schulbücherverlag, 1921. 96 kronen.

In this work the author summarises the principles which she has advocated for many years. The Combined Training Courses in Social Welfare (*Vereinigte Fachkurse für Volkspflege*), which she has established, aim at giving a general view of the problem from the point of view both of health and of economics. The main principle advocated by the author is that the various branches of welfare activity should be combined into a compact system which she calls *Volkspflege*. It is, in fact, true that specialisation in the different branches of welfare work has sometimes and in certain directions produced remarkable results, but it has also led to a dispersion of effort which is in the long run prejudicial. The author shows how the different causes of misery react on each other, and how necessary it is to fight simultaneously, above all "by preventive measures, against all that gives rise to physical or spiritual suffering.

ASSOCIAZIONE FRA LE SOCIETÀ ITALIANE PER AZIONI; CONFEDERAZIONE GENERALE DELL'INDUSTRIA ITALIANA: *Note sulla situazione economica dell'Italia*. (ASSOCIATION OF ITALIAN JOINT-STOCK COMPANIES; GENERAL FEDERATION OF ITALIAN INDUSTRY: *Notes on the Economic Situation in Italy*). 192 pp. Rome, Athenæum, 1921. 16 lire.

This publication, signed by Mr. Volpi, Chairman of the Association of Italian Joint-Stock Companies, and Mr. Olivetti, General Secretary of the General Federation of Italian Industry (the employers' trade organisation), gives a very complete picture of the present economic situation in Italy. "Our object", say the authors in their introduction, "has been to furnish those who are working for national reconstruction with the necessary data for an exact comprehension of the Italian economic situation, without allowing ourselves to be misled by our patriotism into an unwarranted optimism". The work, which is very rich in statistical information brought up to 1921, includes chapters on the position in the different industries, the cost of living, wholesale and retail prices, population movements, agricultural production, international trade, and the financial situation.

BENOIT, Eugène. *La législation sur les accidents du travail (Legislation relating to industrial Accidents)*. 2nd edition revised, corrected, and considerably enlarged. 79 pp. Saint-Claude (Jura), Imp. de la Maison du Peuple. 1921. 5 fr.

This work of popularisation consists of two parts; firstly, an examination of the principles of French legislation relating to industrial accidents, in which the author clearly indicates in a few pages the essential differences between the old legislation and the new, the basis of which is constituted by the Act of 9 April 1898; secondly, the texts of the most important Acts and Decrees in force, such as the Act of 9 April 1898 and subsequent enactments. These are presented so as to illustrate the two main characteristics of the history of French legislation on industrial accidents: in the first place, the extension of the Act of 1898 to a constantly increasing number of workers by the Acts of 1899, 1906, 1907, and 1914, and in the second place, its extension to industrial diseases by the Act of 25 October 1919. The texts of the Acts are accompanied by a brief commentary explaining difficulties of interpretation and application, and by reports

on cases on which legal decisions have been given, thus showing how the most common forms of dispute are normally solved. Mr. Benoit's work is thus in the nature of a hand-book, which clearly outlines the rights and duties of workers and employers, and also the procedure to be followed. It will be of undoubted service to both sides.

• BORET, Victor. *Pour et par la terre (For the Land and by the Land)*. 318 pp. Paris, Payot. 1921. 6 frs.

Mr. Boret, a former Minister of Agriculture, has set himself in this book to deal "not with purely technical agricultural questions, but with the economic, social, legal, and financial questions which constitute the essential elements of agrarian policy". He attempts to show that the economic recovery of France depends not only on a better utilisation of the land, but on its better distribution among those who are capable of working it, and lays down the principle that peasant proprietorship, having for its basis the working of the land by the family, is the system which produces best and most cheaply. "All organisation of agricultural labour, all agrarian policy, should aim at these two objects: the accession to ownership of all rural workers, and the foundation of peasant family properties". Mr. Boret explains how this process may be encouraged, among other means, by associations to co-ordinate effort, by an amendment of the code, which would prevent the splitting up of peasant properties, and by a reform of the banking methods of the *Crédit Agricole* and the *Crédit Foncier*. Discussing measures which would keep the workers on the land, he rejects as altogether inapplicable the principle of the limitation or even the regulation of hours of work; but he recommends an improvement of the material position of the agricultural worker by raising wages and by making living-in conditions more healthy.

CESTRE, Charles. *Production industrielle et justice sociale en Amérique (Industrial Production and Social Justice in America)*. 324 pp. Paris, Garnier. 1921. 7.50 francs.

This book, which contains a great wealth of information, is the result of an enquiry undertaken by the author in 1919, "on social reforms in American industry in the principal manufacturing districts of the country, from New York to Puebla, and from Madison to Baltimore". In Mr. Cestre's opinion America has "the merit of having outlined an original and fruitful solution of the social problem", thanks to its "spirit of enterprise and belief in the application of science to human activity", as well as to the "liberal spirit of the employers' class", and the "moderation and constructive spirit of the working class". This reform movement, "an advance-guard movement which is carrying the great mass of American industry with it", is analysed in its three principal aspects—organisation, humanisation, democratisation. The author shows how the scientific organisation of labour, of the factory, and of accountancy, on the Taylor system, makes it possible to obtain the maximum efficiency and output; how the development of welfare work in the factory, the attitude of the American employer towards his workmen, and the important part played by the employment manager, are inspired by a constant desire to regard and to treat the worker not as a machine, but as a thinking and feeling human being. He shows also how the establishment of a constitutional system in the factory, and the powers given to workers' councils, tend to establish a parallelism between industrial and political society. The results which have been achieved do honour both to the working class and to the employers' class, and show "that co-operation between capital, intellect and labour is possible, and that it already exists". "The American system", the author concludes, "is probably not applicable to the social problem as it exists in France without modification, revision, and adaptation". It is, however, a source "of instructive experiments, valuable precedents, and generous suggestions".

CITRINE, Walter M. *The Labour Chairman and Speaker's Companion Guide to the Conduct of Trades Union and Labour Meetings*. With a

Foreword by the Rt. Hon. J. H. Thomas, M.P. 171 pp. London, Labour Publishing Co., Ltd. 1921. 2s. 6d.

This short and clear explanation of the rules of debate and the conduct of public and association meetings should be of considerable use to all who wish to conduct meetings in an efficient and businesslike way and to avoid the loss of time caused by ignorance or neglect of procedure. It describes in simple language general procedure relating to meetings and covers all the ground that is likely to be needed in any ordinary circumstances. It is well arranged and indexed and information on any required point is easily found.

COMMISSION SYNDICALE DE BELGIQUE : *Rapport annuel pour 1920 présenté au XXme congrès syndical des 9, 10 et 11 juillet, 1921.*

(TRADE UNION COMMITTEE OF BELGIUM : *Annual Report for 1920 submitted to the Twentieth Trade Union Congress held on 9, 10 and 11 July, 1921.*) 142 pp. Brussels, impr. co-opérative Lucifer. 1921.

This is an account of the work done by the Trade Union Committee in 1920, "a year of many disputes and fruitful in instruction". This report contains information on new organisations which have become affiliated to the Trade Union Committee, on the trade union congresses held during 1920, on the work undertaken in the devastated areas, on the chief interventions of the Trade Union Committee in difficult cases, on the work of the joint committees, the struggle for the 8-hour day, the international relations of the Trade Union Committee, the struggle against the high cost of living, the Genoa Conference, etc. The report concludes with a series of tables giving statistics of strikes and their results, of contributions levied by the central organisations, and the amount of compensation which they guarantee, as well as the numerical and financial situation of the affiliated federations, etc.

COMMISSION SYNDICALE DE BELGIQUE : *Rapports soumis aux délibérations du XXme Congrès syndical des 9, 10 et 11 juillet, 1921, à la Maison du Peuple de Bruxelles.* (TRADE UNION COMMITTEE OF BELGIUM : *Reports submitted to the Twentieth Trade Union Congress held at the Maison du Peuple at Brussels, on 9, 10, and 11 July, 1921.*) 42 pp. Brussels, impr. populaire, 1921.

The nine reports here published deal with the following questions : the industrial crisis, trade union concentration, the control of industry and the action of the Economic Council, index numbers and wages, piece-work, district arbitration councils, relations between trade unions and co-operatives, increase in the number of members on the Secretariat of the Trade Union Committee and contributions to the Trade Union Committee.

COMMISSION SYNDICALE DE BELGIQUE : *XIXme Congrès syndical tenu à Bruxelles les 17 et 18 octobre 1920.* (TRADE UNION COMMITTEE OF BELGIUM : *Nineteenth Trade Union Congress held at Brussels 17 and 18 October 1920.*) 105 pp. Brussels, impr. populaire, 1921.

The questions discussed at the nineteenth Belgian trade union congress were the 8-hour day, income tax, the socialisation of industry, apprenticeship and technical education.

DALLOZ (petite collection) : *Code du Travail et de la Prévoyance sociale*, 8me édition revue, corrigée et augmentée; *Additions au Code du Travail jusqu'au 1er octobre, 1920.* (*Code of Labour and Social Welfare*, eighth edition, revised, corrected and enlarged; *Additions to the Labour Code up to 1 October 1920.*) 51 pp. Paris, Dalloz. 1920.

In view of the ever increasing importance of labour legislation, the firm of Dalloz has published this new volume separately, in a handy form, in its small legislative series. It contains, first, the texts which have now been codified by the Commission set up in 1901 to co-ordinate the various provisions of the labour laws in logical order; Book I concerns labour agreements, and Book II the regulation of labour. Then come the texts of labour laws which have not yet been codified in chronological order. The Acts and Decrees which have been drawn up between the publication of the Dalloz Code and 1 October 1920 are printed in an appendix. An accurate and detailed index makes the discovery of information on any particular question an easy task.

FRANCO, Roger. *Les organisations du capital (The Way Capital is organised)*. Paris, Groupe d'études techniques et économiques des Grandes Ecoles. 1921. 0.75 francs.

This is a brief explanation of the different forms which the organisation of capital has adopted in France : corporative and economic, financial, political, and international.

INSTITUT D'ECONOMIE SOCIALE : *Almanach polonais pour 1921* (INSTITUTE OF SOCIAL ECONOMICS : *Polish Almanac for 1921*). 148 pp. Warsaw, Société de Publications internationales, with the approval of the Government Intelligence Department. 1921.

The object of this almanac is "to give foreigners and those interested in politics and economics some knowledge of the Poland of today". It contains "a sketch of the more important aspects of Polish life and of its lines of development". Successive chapters illustrate briefly the main features of Polish society, giving interesting particulars of the trade union movement, rural conditions, workers' co-operative societies, social legislation and the regulation of labour conditions, industrial democracy, collective agreements and arbitration, the protection of tenants, and health insurance.

KRAUSE, J. *Reichsverordnung über Erwerbslosenfürsorge vom 13 November 1921 in der Fassung der Bekanntmachung vom 26 Januar, 6 Mai, 11 August, 1921.* (*Federal Order of 13 November 1918 concerning Unemployment Relief, as given in the Text of the Proclamations on 26 January, 6 May and 11 August 1920.*) 172 pp. Stuttgart J. Hess. 1921. 17.60 marks.

This is a commentary on the German Federal Order concerning the different forms of unemployment relief. It follows the Order clause by clause. The observations embody the results of the long experience of the author as Commissioner for Unemployment Relief and therefore are of great value. Full account is taken of the decisions and interpretations adopted by the Ministry of Labour. An excellent index adds greatly to the usefulness of the volume.

PICARD, Roger. *La crise économique et la baisse des salaires (The Economic Crisis and the Reduction of Wages)*. 57 pp. Paris, Librairie des Sciences Politiques et Sociales, M. Rivière. 1921.

After tracing the development of the existing economic crisis in Japan, the United States, and Europe, the author examines the movement towards the reduction of wages which is accompanying this crisis in the various countries, and studies the opinion of the workers on this reduction. Taking as his basis the index numbers of retail prices, he calculates the exact effect on the working classes of the present cost of living. From his study of different aspects of the question, he draws the conclusion that "the reduction of wages is premature at the moment", and also that, since wages are not the most important element in fixing selling prices, their reduction cannot be an effective means of lowering prices, and still less of putting an end to the economic crisis.

Premier rapport annuel sur l'activité de la Fédération Suisse des employés des Postes en 1920 (First Annual Report of the Swiss Federation of Postal Employees in 1920). 78 pp. Lausanne, impr. Fritz Ruedi. 1921.

This Report deals with the work of organising the Federation, its professional activities, its collaboration with various other groups of employees, and its philanthropic work. The report may be summed up by saying that the year 1920 was a year of progress, and, in particular, that it saw two fundamental claims of the postal staff realised : the coming into force of the insurance scheme and the revision of the law on work in transport undertakings.

RIORDAN, E. J. *Modern Irish Trade and Industry*. 335 pp. London, Methuen & Co. 1920.

The aim of this work is to supply the reader with a connected account of the main factors which constitute the history of Irish trade and industry from about 1850 to the present day. To cover the earlier period, dating back to the XVIIth century, Dr. George O'Brien contributes an admirably succinct historical introduction. Mr. Riordan, who is the Secretary of the Irish Industrial Development Association, shows the importance of certain trades and industries in Ireland, notably agriculture, fisheries and the manufacture of food products, shipbuilding and engineering, and the textile industries, and draws attention to what he considers to be the main causes which have arrested general industrial development in Ireland.

SCHIFF, Prof. Dr. Walter : *Der Arbeitsschutz der Welt (Labour Protection throughout the World)*. 487 pp. Tübingen, J.C.B. Mohr (Paul Siebeck). 1920. 36 marks + 50 per cent. tax.

This book is the first attempt to give a clear statement of measures for the protection of labour in all countries.

The material is divided in the first place under countries, which are grouped in continents. The greater part of the information is then grouped internationally under subjects, as far as possible on a uniform system of classification as follows: (1) protection of workers in general without distinction of age or sex; (2) protection of women; (3) protection of young persons; (4) protection of children; (5) protection of motherhood; (5) weekly rest; (7) holidays; (8) hours of labour; (9) safety and hygiene regulations; (10) minimum wages; (11) methods of payment; (12) control over the execution of regulations.

At the beginning of this interesting book is a résumé of the state of legislation in European countries.

SOREL, Georges : *Les illusions du progrès (The Illusions of Progress)*. 390 pp. Paris, M. Rivière. 1921. 9 francs.

This, the third edition of *Les illusions du progrès*, is enriched by a new chapter devoted to a criticism of the theories of Marx on the inevitable character of the evolution of the modern world in the direction of a socialistic economic system, an evolution whose laws and stages may be studied and defined scientifically. Mr. Sorel declares, on the contrary, that "the movement towards socialism will not follow a course so simple, so necessary, and consequently so easy to describe in advance as Marx supposed".

SVENSKA ARBETSGIVAREFORENINGEN (SWEDISH EMPLOYERS' ASSOCIATION) : *Kalendar, 1 maj. 1920 (Calendar, 1 May 1920)*. 452 pp. interleaved. Stockholm, 1920.

Arbetarnes löner inom ett antal svenska industrigrenar, undersökning för år 1919 af Svenska arbetsgivarföreningens statistiska byrå: Svenska arbetsgivarföreningens lönestatistiska årsbok, 1919 (Wages in various branches of Industry in Sweden for the year 1919, prepared by the Statistical Bureau of the Swedish Employers' Association: Wages Year Book of the Swedish Employers' Association, 1919). 388 pp. Stockholm. 1921.

Styrelse- och revisionsberättelser för år 1920 (Report of the Board of Directors and of the Auditor for the year 1920). 62 pp. Stockholm. 1921.

The *Kalendar* is a list of employers' associations in Sweden, classified by industry groups.

The second volume includes a tabulation of wages in Swedish industries for the year 1919, covering such branches as iron and steel; machine and metal trades; electrical industries; coal mining, other mining and quarrying; cement, clay, glass and pottery industries; lumber and saw-mills; wood working industries; paper making; bookbinding; printing, publishing and lithographing; flour and grist mills; beet-sugar manufacture, chocolate and confectionery industries; brewing and distilling; slaughtering and meat packing; tanning and leather industries; shoemaking; wood pulp manufacture; rubber industry; etc., etc. Material is presented in the form of average annual earnings, classified annual earnings, hourly wage-rate, with percentage increases 1914-1919; in some instances piece-rates are given.

The statistics for the year 1919 cover 125,397 employees, 83.1 per cent. being adult males, 7.5 per cent. adult females, and 9.4 per cent. minors.

The Swedish Employers' Association, according to its administrative report for the year 1920, the third volume listed above, had at the beginning of the year 1921 3,893 members organised in 42 different associations, in whose employ there were 298,866 workers.

TURMANN, Max. *Problèmes sociaux du travail industriel (The Problems of Industrialism)*. 241 pp. Paris, libr. Lecoffre ; J. Gabalda, édit. 1921. 7 francs.

This is a study of the industrial problems which are to the forefront in certain countries: the progressive limitation of working hours, the 8-hour day and 48-hour week; houses and grants to workers on account of dependents; workers' control of industry and workers' representation on boards of directors; profit-sharing; and international labour legislation. The development and tendency of each problem is studied, the author showing how each arose and the successive stages through which it has passed, not only in France, but in foreign countries; he summarises the opinion and attitude of workers and employers, lays particular stress on the solutions which have been found, or which appear likely to prevail, and examines the influence and effects of the reforms which have already been accomplished. The last chapter contains a very clear historical account of international labour legislation in the last fifty years, from the work of the sociologist Legrand down to post-war institutions, more especially the International Labour Office, "which", the author concludes, "may bring an increase of justice and happiness to mankind".

UNION CENTRALE DES ASSOCIATIONS PATRONALES SUISSES: Bulletin No. 9; *Le Cout de la Vie : salaires payés en Suisse et à l'étranger* (CENTRAL FEDERATION OF SWISS EMPLOYERS' ASSOCIATIONS. Bulletin No. 9; *The Cost of Living : Wages paid in Switzerland and other Countries*). 13 pp. Zürich, A. Baur. 1921.

This *Bulletin* contains in the first place the results of an enquiry conducted in Switzerland on the increase in the cost of living between 1 June 1912 and 1 January 1921 and on price fluctuations since 1 October 1920, and in the second place a comparison between the wages paid in certain industries in Switzerland, France, Italy, and Germany.



THE METRIC AND BRITISH SYSTEMS OF WEIGHTS AND MEASURES

A. Metric Measures in terms of British.			B. British Measures in terms of Metric.		
UNIT	EXACTLY	ROUGHLY	UNIT	EXACTLY	ROUGHLY
A. Lineal Measures					
Millim.	0.0894 inches	one 25th of an inch	Inch	25.399 mm.	4 in. = 10 cm.
Centim.	0.3937 "	10 cm. = about 4 ins.	Foot	30.479 cm.	30 cm.
Metre	39.371 "	11 metres = 12 yards	Yard	0.9144 metres	11 yards = 10 metr.
Kilom.	0.6214 miles	5 furlongs	Mile	1.6093 km.	5 miles = 8 km.
B. Square Measures					
Sq. Metre (centiare)	1.196 sq. yds.	1 1/8 sq. yds.	Square Inch	6.451 sq. cm.	
Are	39.56 poles	10 ares = 1/4 acre	Square Yard	0.836 sq. metr.	6 sq. yds = 5 sq. metr.
Hectare	2.471 acres	2 1/2 acres	Acre	0.40467 hect.	1 acre = 2 1/4 hect.
			Sq. Mile	2.5899 sq. km.	100 sq. miles = 260 sq. km.
C. Measures of Capacity					
Litre	1.76 pints	4 1/8 litres = 1 gallon	Pint (liquid)	0.5679 litres	1 litre = 1 3/4 pints
Decalitre	2.201 gallons	5 decalitres = 11 gallons	Quart (liquid)	1.1359 "	—
Hectolitre	22.01 "	22 gallons	Gallon (liquid)	4.5435 "	4 1/8 litres
			Peck (dry)	9.087 "	22 gallons = 1 hectol.
			Bushel	36.34766 "	9 litres
					36 litres
D. Measures of Weight					
Gramme	0.353 oz.	454 grs = 1 lb.	Ounce	28.35 grs.	7 oz. = 200 grs.
Hectogr.	3.527 "	nearly 1/4 lb.	Pound	453.59 "	1/4 kilo
Kilogr.	2.2046 lbs.	5 kilos = 11 lbs.	Hundred-weight	50.802 kilos	22 lbs = 10 kilos
Metric Ton	2,204.6 lbs.	1 Long Ton	Short Ton (2,000 lbs)	901.6 "	50 kilos
			Long Ton (2,240 lbs)	1,016.04 "	900 "
					1,000 " (1 Met. Ton)

