

REPORTS AND ENQUIRIES

Land Settlement in Chile 1

The need for a change in the trend of land settlement policy in Chile has been strongly felt since the war. The settlement methods of the last century, which consisted principally in handing over State lands to private persons, who were then left to develop them by settling families of agriculturists on them, resulted in most cases, even when the concession was granted on the express condition that the land should be populated, in the mere "legal occupation" of the territory. This, although perhaps a necessary stage in the process of opening up the country, was certainly not the ultimate purpose of the many settlement laws which enabled State domains to pass into the hands of private owners. Large areas remained uncultivated, while elsewhere the landowners contented themselves with cultivating their lands superficially by means of paid labour or under share-farming contracts of various kinds. It was only in a few regions, including in particular the province of Valdivia, that settlement in the true sense of the term made any real headway.

Although the existence of large estates and the scarcity of small and medium-sized holdings are not features peculiar to Chile, their economic consequences have been particularly marked in that country. In essentially agricultural countries, such as Argentina, for instance, these conditions have not retarded the development of the land, even with the somewhat precarious method of tenant farming or cultivation by paid labour. But in Chile, where the mining industry absorbed a large proportion of the available labour, agriculture seems to have remained definitely backward. This fact was realised with particular force when the mining industry, the chief source of the country's wealth, began to undergo the difficulties with which readers of this article are no doubt familiar. It has given rise to the situation, paradoxical for a country with as rich a soil as Chile, described in the most recent report of the Chilean Land Settlement Fund as follows:

¹ For other articles on problems of migration and settlement, cf. International Labour Review, Vol. XXX, No. 4, Oct. 1934: "Openings for Settlers in Argentina", by Dr. Enrique Siewers; Nos. 5 and 6, Nov. and Dec. 1934: "Jewish Colonisation in Palestine", by M. Berenstein; Vol. XXXIII, No. 2, Feb. 1936: "Land Settlement in Brazil", by Dr. R. Paula Lopes; No. 5, May 1936: "The Levant States under French Mandate and Problems of Emigration and Immigration", by M. Berenstein; Vol. XXXIV, No. 1, July 1936: "Migration and Settlement in Australia, New Zealand, and Canada", by D. Christie Tait.

"The average diet of the population is far from adequate. Chile depends on foreign countries for a number of agricultural products such as sugar, oil-yielding plants, textile fibres, which could easily be produced at home, while many other products which would supply a real want are not consumed because they are not cultivated, and this in spite of the comparative ease with which they could be distributed thanks to the configuration of the valleys and the length of the country's seaboard."

After the war various schemes and suggestions were put forward and discussed in the press, in Parliament, and in Government circles. Their object was to break up the rural estates in order to ensure, on the one hand, more intensive cultivation of the soil and, on the other, a more balanced social organisation by enabling individuals to acquire possession of a piece of land large enough to maintain themselves and their families.

These considerations, which were both economic and social in character, found expression in the political Constitution of 1925, which provides in section 10 that "the exercise of the right of property is subject to the restrictions and rules required by the needs of social progress, and the law may accordingly impose any obligations or charges of public utility which may be dictated by the interests of the community". It is also provided that "the State shall promote a suitable division of the land and the constitution of family holdings".

CONSTITUTION OF THE AGRICULTURAL SETTLEMENT FUND

The new Constitution thus gave a fresh and active trend to land settlement policy, which had hitherto depended too exclusively on private enterprise. The instrument necessary to implement this new policy was furnished by an Act (No. 4496 of 10 December 1928) setting up the Public Land Settlement Fund, an autonomous institution charged with the duty of "founding, guiding, and administering agricultural settlements with a view to organising and expanding production and promoting the breaking up of agricultural estates, having recourse for this purpose to both national and foreign agriculturists". Should the Fund be unable to acquire a sufficient area of land for its purposes on the open market, section 12 of the Act, which is a direct corollary of the social conception of property embodied in the Constitution, provides that "the Fund may request the President of the Republic to expropriate any land which it may need to establish or complete its settlements". The constitutional principle of protecting the family unit is reflected in section 33 of the Act, under which "the widow and children of a deceased settler may retain joint possession of the holding, subject to agreement among themselves; otherwise the holding shall be put up to auction, provided that if the bids are equal it shall preferably be assigned to the widow and minor

The Act endowed the Fund with a capital of 100 million pesos to be paid by the State in five annual instalments of 20 million pesos out of credits provided in the annual budget. Apart from this financial tory to placing them in one of the other two types of settlement. The training settlements are not divided into holdings, although each trainee may be granted a plot of land for cultivation on his own account during his spare time, in addition to participating in the collective work, which is compulsory. An example of this type is the settlement of El Sauce, founded on State land ceded to the Fund near the town of Los Andes. In this settlement the governing body of the Fund is training 34 families of future settlers in the various branches of farming, including vegetable and cereal crops, the use of pasture land and cultivation of fodder for sale, the breeding of dairy cattle, and a number of new experimental crops. The last balance sheet of this settlement showed a gross profit of 242,118 pesos. In accordance with the rules of the Fund, the interest on the invested capital and an allowance for depreciation of machinery and tools must be deducted from the gross profit, the remainder representing the net profit for distribution between the manager, the paid staff, and the trainees. Of the proportion due to the trainees, part is retained for distribution as bonuses to those who have shown the greatest keenness in looking after their houses and cultivating their private gardens. The rest is distributed among all the trainees in proportion to the number of days worked by each, half the amount being paid in cash and the rest placed to their account at the National Savings Bank with a view to building up a small capital which will enable them to pay the necessary deposit when taking up their holdings in an A or B type settlement.

In addition to the loan on property, which is repayable in 33 years and usually covers, besides the value of the land, the cost of the buildings, irrigation work, roads, and certain planting, fencing, and other improvements, the Fund also makes loans to the settlers for working expenses and for certain permanent investments not included in the principal loan. These loans bear interest at 4 per cent. and may be either individual or collective. Individual loans for the purchase of seed and fertilisers are repayable in 2 years; those for the purchase of live stock and implements in 5 years; those for fencing, machines fruit trees, plant, drainage, etc., in 10 years; those for permanent improvements carried out under the Fund's supervision in 15 years and those for the building of a house, if not already included in the value of the holding, in 20 years.

As regards collective loans to groups of settlers for the execution of works of general utility, the term for repayment is fixed in each case by the governing body of the Fund in accordance with the nature of the work.

The internal organisation of the Settlement Fund necessarily includes a number of specialised services. Neither these nor the methods used to ensure the co-ordination of the different services, a feature of particular importance in an institution in which the activity of each department is complementary to that of all the others, need be described in detail here. But in order to give some idea of the complex operations involved in founding a settlement, it may be recalled that the Fund has first to make a general survey of the different regions of the country in order to determine the most suitable regions for

contribution, the President of the Republic is also given power to transfer to the Fund free of charge any State lands suitable for settlement south of the river Bio-Bio and in the north beyond the province of Coquimbo. The Fund may acquire any other land necessary by public tender, by direct purchase, or, as already stated, by expropriation ordered by the President of the Republic at the Fund's request.

The Settlement Fund is not a profit-making institution. The Act provides that the holdings shall be resold to the settlers at cost price, which comprises the purchase price of the land, and the cost of demarcating the holdings and of any irrigation works or other improvements carried out with a view to making them fit for cultivation. moneys of the Fund must be used strictly for the purposes for which the Fund was set up. These purposes are: (1) to purchase, break up into holdings, and prepare the land for settlement; (2) to grant individual loans to settlers for the purchase of implements, machinery, seed, plants, livestock, and in general of all necessary equipment; (3) to grant collective loans at a low rate of interest to settlers organised in co-operative societies in order to enable them to set up industrial plant for working up or transforming their products; (4) to set up on its own account factories or plant for working up the raw materials produced in the settlements, shops, and experimental stations: to build schools; and to organise communications and all other services necessary to the settlement; (5) to meet the special expenditure entailed by promoting the settlement of foreign immigrants.

The settlements organised by the Fund are of three different types. "Type A" settlements are intended primarily to encourage the systematic development of production, which, as already stated, was one of the main purposes of the Act. These settlements are founded entirely by the efforts of the Fund, which recruits the settlers with special regard to their suitability for a particular kind of farming. The settlers are required to pay only a minimum deposit, of 5 or 10 per cent. according to the region, on the value of the land, the buildings, and the improvements carried out, the remainder being repayable in 33 annual instalments beginning two or four years after the settler takes possession of his holding, according to the kind of crops grown. The settlement of Peñaflor, fuller particulars of which are given below, belongs to this first type of settlement.

"Type B" settlements are set up at the request of groups of at least five would-be settlers. Their principal object is to facilitate the breaking up of the large estates, the second purpose of the Act. In this type of settlement the control exercised by the Fund is less strict, especially in regard to the choice of crops. The settlers must be able to pay a minimum deposit of 10 or 20 per cent. according to the region, and are also usually required to have a small working capital. The rôle of the Fund is mainly confined to buying the land and reselling it to the settlers on easy terms of repayment, in principle the same as those for settlers in Type A settlements.

The "training settlements" are reserved for Chilean workers and are intended to train, select, and specialise intending settlers prepara-

breaking up large estates, and then to examine the estates suitable for breaking up as regards their agricultural features and suitability for settlement, calculate their probable yield, determine the most suitable types of settlement, and purchase the estate after a careful verification of the title deeds. The next stage is to divide up the land into holdings with due regard to the best distribution of crops, assess the value of each holding, carry out the necessary irrigation work, build houses and other farm buildings, construct roads within the settlement and connect it with public highways, set up the industrial plant for the settlers' co-operative societies, build a school and premises for the welfare services, and lastly, make each holding ready for immediate cultivation by the settler and his family. But the constructive activities of the Fund do not end here. It still has to help the settler to run his farm, give him technical advice, organise and supervise the co-operative societies formed to work up and transform the products, make loans to the settlers for working expenses or any of the other purposes already mentioned, and supervise the repayment of all the loans so made. Finally, it has also to provide the social assistance on which the Act and the administrative regulations issued under it lay particular stress. It is not enough to provide the settlers with all the material means of success; their initiative must also be stimulated if prosperity is to be achieved, and above all maintained. Not only the physical health but also the moral and mental development of the settlers are important factors in the financial success of the settlement schemes.

ACTIVITY OF THE SETTLEMENT FUND FROM 1929 TO 1934

Since the Fund began its activities in 1929 it has organised about thirty settlements. This comparatively slow rate of progress is due to the economic and financial depression through which Chile was passing during this period, and which required the utmost prudence to be exercised in planning the settlements in order to ensure that they should pay their way. A further difficulty was that at the time when the Fund began its operations the price of land had reached heights unprecedented in the annals of the country. But the Fund's chief handicap was the fact that the Government found it impossible to pay regularly the annual instalments of 20 million pesos which were to constitute its capital. By 1933, when the whole capital of 100 million pesos should have been paid up, the State had paid into the Fund only 29,930,000 pesos. Although this delay did not affect the financial soundness of the Fund, it nevertheless considerably restricted its powers of action. But in spite of the difficulties through which the public finances were passing at that time, the Government continued to take a lively interest in the activities of the Fund and tried to promote them in various ways. Under an Act of 9 January 1930 the Fund was authorised to issue mortgage bonds guaranteed by the State from which to make mortgage loans to the settlers up to 80 per cent. of the value of their holdings. The Fund issued only 655,000 pesos' worth of these bonds up to 1932, and the whole of this debt was paid

off by 1933. Another Act, of 23 February of the same year, gave the President of the Republic power to transfer State domains to the Fund not only in the north and south of the country as previously, but also in the central region. In pursuance of an Act of 18 April 1932 the Government placed a special credit of nearly 2 million pesos at the disposal of the Fund for the purpose of founding collective settlements. designed in the first place to relieve unemployment but destined to be transformed into training settlements later on. Towards the middle of 1932 the Central Bank of Chile was authorised to discount settlement bills up to a total of 20 million pesos at the specially favourable rate ofs 2 per cent. The Fund took advantage of this facility only up to a total of 12 million pesos and subsequently abandoned the scheme, since the Bank's short-term loans were incompatible with the very longterm loans which the Fund was obliged to make to the settlers. Lastly, another Act exempted from transfer duty the purchase of holdings by settlers and of estates by the Fund.

THE REORGANISATION OF THE FUND IN 1935

In 1935 the governing body of the Fund was instructed to draft a Bill to replace the basic Act of 1928. The object in view was to bring the provisions of the old Act into harmony with the various additional measures adopted during the depression, to incorporate the lessons of experience, and to broaden the financial basis of the Fund by increasing the State contribution and placing at its disposal certain long-term credits provided for under the subsequent legislation on the organisation of credit.

Under the terms of the new Act (No. 5604 of 15 February 1935), the State is to pay a total sum of 100 million pesos in four annual instalments of 25 million pesos to the Fund, which will also retain the previous payments made under the 1928 Act. Should there be any delay in the payment of these four instalments, which are to be provided for in the annual national budget, section 71 of the Act empowers the President of the Republic to issue a domestic loan under State guarantee, to be taken up preferably by the social insurance funds and the National Savings Bank, and to be issued in instalments, the amount of which will be fixed by the Land Settlement Fund itself, subject to an annual limit of 50 million pesos. It is also provided that the State contribution to the insurance fund shall be paid in the form of settlement bonds.

Apart from these financial resources, the payment of which is thus practically assured, the new Act also provides for the transfer to the Fund on a larger scale than before of State lands suitable for settlement in any part of the country. Upon a favourable report by the Fund, the President of the Republic is empowered to accept private land in payment of debts on account of irrigation work and to place it at the disposal of the Fund. He may also order a general review of the concessions granted to private persons in the southern part of the country and hand over to the Fund any land found to be held without proper title. Lastly, the governing body of the Fund may also propose that

the President of the Republic should cancel concessions or leases of State lands if the holders have not carried out the undertakings specified in the concessions or leases. Under section 39 of the Act the Fund may sell any land ceded to it under this provision that it considers unsuitable for settlement, a provision representing an additional source of income.

GENERAL OBSERVATIONS

The statutory provisions outlined above show that the Chilean Government has been anxious to give the widest possible scope to the activities of the Fund, which, according to section 3 of the Act, is "the sole official body responsible for founding, directing, and administering the agricultural settlements". To quote the most recent official report of the Fund, "the capital and other resources now at the disposal of the Fund are certainly not too large for the accomplishment of the immense task which it has to perform, and which takes on ever larger dimensions as the possibilities of land settlement in the different parts of the country are progressively explored." surveying the history of land settlement policy in the State of Chile, the report distinguishes three periods. The first extends from the earliest settlement laws to the Constitution of 1925, which proclaims the social function of land ownership, and on to the Act of 1928 which translated this constitutional principle into practice. The second comprises the seven years during which this Act was applied, though still only on a modest, cautious, and somewhat experimental scale. The third began with the new Land Settlement Act of 1935 and is destined to see the accomplishment of the vast task of organising agricultural production and populating the national territory on an intensive scale.

In this task of economic and social progress foreign immigration would still to have an important part to play. This is defined in the report of the Fund in the following terms: "The Land Settlement Act aims at a closer settlement of the country and appeals to both national and foreign settlers for the fulfilment of this purpose. The only type of settlement which is more especially reserved for Chilean workers is the training settlement, and even this exception does not apply to aliens who have been in the country for ten years. . . . The Land Settlement Fund will help to populate the country by encouraging the immigration of selected agricultural workers. . . . Foreign immigration has obvious advantages. No one can deny that to meet the needs of its rural areas and to enable the land settlement schemes to be developed to the full. Chile needs a fresh influx of active foreign labour. The Fund will therefore try to organise the immigration of selected foreign settlers, in the conviction that their abilities will make a definite contribution to progress." This point of view is again emphasised in the conclusion of the report, which states that "the necessity for developing the activities of the Fund on the one hand and for speeding up the process of populating the country on the other calls for an influx of selected agricultural immigrants whom the Fund will instal methodically on the land."

In pursuance of these principles, the Land Settlement Fund did in fact draw up detailed schemes for settlement by foreign immigrants from the very outset. The first of these schemes resulted in the founding of the settlement of Peñaflor. A second scheme, planned in 1930 and providing for the entry into the country of a number of skilled dairy farmers, had to be abandoned owing to the obstacles of all kinds, due to the depression, which made recruiting in Europe difficult and which has already hampered the execution of the first scheme to some extent. Most of the holdings in this second settlement were ultimately assigned to Chileans.

A few particulars may be given of the settlement of Peñaflor, which is particularly interesting as being the first scheme carried out by the Fund with the aid of foreign workers. The settlement was founded on an estate situated only 26 kilometres from the city of Santiago, with which it is connected by a railway and a good road. The 463 hectares of which this estate consisted, and which were suitable for all kinds of crops but more especially for fruit growing, were divided into 43 holdings of an average size of 10 hectares. A system of irrigation was installed and each holding was provided with a comfortable dwelling-house, a cow-shed, a pig-sty, and a poultry-house. The price of each holding, including the buildings and the share of the holding in the cost of the general improvements, varied between 73,189 and 92,833 Chilean pesos. Eight holdings were assigned to Chileans and 35 to German settlers recruited in Bavaria, Württemberg, and the Rhineland, with the help of the Chilean Consul in Berlin. As at the last moment several of the immigrants were unable to find the necessary deposit, or even to pay for their passages, not having been able to realise their property in Germany in time, the Consul advanced the necessary sums, which the settlers undertook to repay in five annual The cost of the passage from Munich to Valparaiso was £24 10s. for adults, children between 6 and 12 years of age paying half fare, those under 6 years quarter fare, and those under 2 years travelling free. As a special concession, the shipping company allowed each family free transport of one ton of personal and other belongings. On arrival in Valparaiso and pending installation on their holdings, the settlers were provided with accommodation by the Fund. first holdings were handed over to the settlers in February 1930, together with the necessary seed, tools, and live and dead stock.

The settlers had bought the holdings by deeds signed before the Chilean Consul in Munich, providing for the payment of 5 per cent. of the purchase price on account, the remainder to be paid by instalments over a period of 33 years. Those who had been unable to realise their property, and could therefore not pay this deposit, were accepted on condition that they undertook to pay the necessary sum later on out of the proceeds of the sale of the property they had left in Germany. Fulfilment of this undertaking was subsequently hindered by the restrictions imposed on the export of capital.

Moreover, as the settlers reached Chile when the depression was at its worst, they were unable during the first few years to fulfil their obligations to the Fund, which was further obliged to make them

maintenance loans varying with the number of persons in the family. But in spite of these difficulties the settlement quickly prospered, and its future prospects are now most promising. At the present time it contains about 300 persons (43 families), and the settlers' children, 80 in number, receive free education in a State school. The land is suitable for a large variety of crops, but the economic side of the scheme was based principally on fruit growing, and the plantations necessarily took a few years to reach their full yield. For the past two years, however, the fruit crop has not only reached considerable proportions. but has also been marketed without any difficulty. In 1934 the settlers' co-operative society managed to sell the whole of its fruit harvest to one firm. The Fund has set up a large factory in the settlement for drying any fruit not sold for fresh consumption; this is later to be taken over by the Federation of Co-operative Societies of the settlements in the Santiago area. The firm concerned has also declared its readiness to set up a canning factory near the settlement, so that the settlers will be able to place on the market, in the most presentable form, an output which in 1935 has already risen to a million kilograms for peaches alone.

Workers' Nutrition in Africa

In the report on "Workers' Nutrition and Social Policy" recently published by the International Labour Office, some reference is made to the nutrition problems of Native labour and to the legislative measures which have been taken in some territories to regulate the scales of rations supplied by employers to Native workers.¹

Almost simultaneously with the issue of this report, there was published in the April 1936 issue of Africa, the journal of the International Institute of African Languages and Cultures, an extremely valuable series of studies of the problems of African Native diet.² The following notes on the nutrition problems of African labour are mainly based on the information given in these studies, supplemented occasionally by other information in the possession of the Office.

The importance of the scientific study of the nutrition problems of African peoples generally, and of African labour in particular, is well brought out in a foreword to the April number of Africa, contributed by Sir John Boyd Orr, and in a note on the general situation.

The former points out that "in advanced countries much improve-

¹ INTERNATIONAL LABOUR OFFICE: Workers' Nutrition and Social Policy, pp. 79 and 138. Studies and Reports, Series B (Economic and Social Conditions), No. 23. Geneva, 1936.

² Africa (Journal of the International Institute of African Languages and Cultures), Vol. IX, No. 2, April 1936. Oxford University Press and Humphrey Milford, London.

ment has already taken place, but among backward peoples such as inhabit many parts of the African continent there is a world of nutritional work waiting to be done. Disease is as prevalent among tribal races as among civilised peoples, and there is clear evidence that not only would much ill-health disappear, but better physique would result if the Native food were adequate in quantity and quality."

The latter observes that "the influence of Western civilisation is changing the Native's mode of life throughout the African continent. In mining and industrial areas he often has to adapt himself to a different climate and altitude and new systems of housing and clothing. He usually has to work for longer hours and with greater intensity than before and is subjected to unaccustomed nervous strains and difficult psychological conditions. The Governments and the industrial undertakings concerned are giving careful attention to the question of a suitable diet for Natives working under these new conditions, but insufficient evidence is so far available as to what changes, if any, should be made in their accustomed diet, and whether those articles of European food which the Native adopts of his own accord are in fact good substitutes for those on which he formerly lived."

The scientific study of nutrition in Africa is in fact only in its initial stages. The International Institute of African Languages and Cultures has, therefore, set up a small committee to consider the possibilities of co-operation between anthropologists and other scientists interested in problems relating to African diets. General aspects of the medical problems of nutrition have been considered by the International Conference of Representatives of the Health Services of African territories and British India and by the Conference on Co-ordination of General Medical Research in the East African Territories. In the Union of South Africa a large collection has been made of Native foodstuffs and a scheme laid down for a general nutritional survey. The Belgian Tervueren laboratories have organised general research on the different foods in use in the Congo. In France an important work has recently been published by a group of professors, doctors and colonial administrators giving a general view of Native nutrition in the French In addition, various valuable special investigations have been conducted, notably in Nigeria, Kenya and the Sudan.

This work is surveyed in the special nutrition number of Africa. In addition, the number contains new contributions to nutritional research, mainly from the anthropological view-point, in an account of a dietary study in North-Eastern Rhodesia by Dr. A. I. Richards and Dr. E. M. Widdowson, an examination of the part played by milk in African nutrition by Dr. Cazanove, and an article on food in the domestic economy of the Tallensi (Gold Coast) by Dr. and Mrs. Fortes. Thirdly, contributions are made to the more specifically labour problems of nutrition in articles by Dr. Trolli on the feeding of Native labourers in the commercial, agricultural, industrial and mining undertakings of the Congo, and by Dr. Orenstein on the dietetics of Natives employed on the Witwatersrand gold mines, while the position of the urban Native is treated in an article by Mrs. Hellmann on urban Native food in Johannesburg.

LEGAL PROVISIONS

The principal line of advance hitherto followed for the improvement of the feeding of Native workers in Africa has been the placing on employers, either by legislation or on the initiative of the employers themselves, of the responsibility of supplying a basic ration to their workers or of ensuring in some other manner that sufficient foodstuffs are procurable by the workers. In the circumstances of migrant labour in Africa, the alternatives may be the victimisation of the workers by local food rings, food shortages both among the workers and in adjacent Native areas and chronic malnutrition. Even where these dangers are not present the provision of rations may still be necessary in consequence of the Natives' unfamiliarity with a money economy. Of this latter eventuality the study on North-Eastern Rhodesia gives an example in stating that "many Natives do not yet consider that money is a commodity which should be exchanged for food, preferring to buy clothes and to go short of meals."

In African labour legislation employers are required in some cases to provide rations for their workers in accordance with prescribed scales. In other instances it is provided that where a worker is housed by his employer or where his feeding by the employer is an agreed condition of employment prescribed ration scales shall be followed. Yet again certain laws more generally provide for a supply of sufficient and wholesome food without specifying the exact composition of the diet. Lastly, in its most attenuated form the employer's obligation is merely to provide against food shortages or to see that food markets are available for his workers.

The following is a summary of the most important instances of such legal obligations.

The supply of rations is compulsory and minimum scales are laid down in the Katanga and Kasai Provinces of the Belgian Congo, in Northern Rhodesia (mines and works), in French Equatorial and West Africa, in Spanish Guinea, and in the Union of South Africa (mines and works in certain districts). The Portuguese Native Labour Code prescribes the issue of rations when the workers are under contract at a place other than their usual residence and also fixes the minimum contents of such rations authorising the local curators to draw up precise scales. In the Union of South Africa, for labourers on mines and works in the Transvaal and other districts where provision is made for rations in the contract, a minimum scale is fixed by law.

In the Equator Province of the Belgian Congo rations are compulsory in accordance with sample scales; but the District Commissioners may authorise payments in cash in lieu of rations. Scales are prescribed in Madagascar, where, however, the issue of rations is compulsory only if the worker so requests, and in Nigeria when the employer has undertaken to feed the worker.

The issue of rations is compulsory, though no binding ration scales appear to have been drawn up, in Kenya, Nyasaland, Tanganyika and South-West Africa, usually for Natives residing on their employer's premises or unable to return home at night unless it has been agreed

that the Native shall feed himself. The right to prescribe rations is expressly reserved to various Government authorities in the Eastern Province of the Belgian Congo, Uganda, Southern Rhodesia, mining areas of the Gold Coast and Sierra Leone, and in the case of mines and works in South-West Africa. Lastly, in Nigeria and Sierra Leone it is an express obligation on employers housing labour to see that means of obtaining food are afforded within a reasonable distance.

The details of the above obligations differ widely. Even where there is a compulsory ration scale, this may range from a weekly issue of unprepared foodstuffs to the provision of a stated number of cooked meals of a prescribed nature. Such details are beyond the scope of the present article. They are, however, of importance in Native labour administration as with workers unaccustomed to regular hours of employment and bound by tribal habits even the free supply of adequate food may do little towards securing health and efficiency. Moreover, it is only by carefully defining details of diet in employment that it is possible to overcome the initial disadvantages resulting from the food on which the worker was nourished in his Native village.

DIETETIC PROBLEMS

Regarding village conditions, the only certainty at the present time is that the vast majority of Africans suffer from insufficient and unsuitable food.

In the account of a dietary study in North-Eastern Rhodesia the following features are noted, among others: (1) striking seasonal variations; (2) a real shortage for two months in the year; (3) a striking fat deficiency; (4) deficiency of animal proteins; (5) entire absence of Vitamin D; (6) a calory value of little more than half that of Europeans. Examining conditions more generally, the Kenya Medical Department's Report for 1933 1 reaches the conclusion that in the average peasant family, taking account of the produce raised on the family's own holding, the cash required for the maintenance of health by the purchase of additional food and means of cleanliness is £13 a year more than the average income.

As regards the suitability of the food, little precise evidence exists. It is suggested, however, in the study of North-Eastern Rhodesia and also by other investigations, notably by Dr. A. Clark in the Cameroons, that cassava, a common African staple diet, is of an extremely low nutritional value and may be a positive cause of nutritional diseases. On the other hand, certain Native practices are described as showing an uncanny knowledge of dietetics, as in Nigeria where in preparing baobab leaves for the flavouring of soups "precautions are always taken to avoid direct sun on the leaves during the drying process, a custom for which a very sound reason has been elucidated by laboratory analysis and experiment; it has been shown that sun-

¹ Kenya Colony and Protectorate. Medical Department: Annual Report 1933. Nairobi, 1935. Cf. International Labour Review, Vol. XXXIII, No. 1, Jan. 1936, pp. 83-87.

drying as opposed to shade-drying destroys the vitamin content of the leaves." ¹

The dietaries of the industrialised Native who feeds himself also require study. The changes in food customs are conditioned both by the new needs of industrial life and by economic circumstances. The article on Native food in Johannesburg suggests that owing to poverty many families live below the minimum required for the maintenance of reasonable health, that a predominance of starch and a lack of green foods are a definite impoverishment on rural standards, but that tea, sugar, bread, sometimes rice, and wherever possible meat, are additions to the diet and probably correspond to definite dietetic needs.

An examination of the dietaries of the Africans in areas of labour supply and an assessment of the changes the independent industrial Native worker appears to require may well supplement purely laboratory research in regard to the best ration for Natives in employment. Moreover, the African, like all other human beings, cannot be treated as a machine whose output will automatically respond to improved fuel. A diet expressly designed to overcome deficiencies may in itself be the cause of serious disease owing to its monotony, or some of its essential elements may be picked out and rejected if presented in unfamiliar form.

PRACTICAL DIET SCALES

Where so little is known of problems of nutrition and where local conditions vary widely, the actual details of the prescribed diet scales in various centres of employment may prove inapplicable generally. There are, however, two instances of dietary policy mentioned in the nutrition number of Africa which must commend themselves to the notice of labour administrators in Africa by the fact that they are the result of long experience and that the labour forces involved are of many different tribes and from widely different areas.

The diet granted to labourers on the Witwatersrand gold mines is claimed to be "one of the most balanced diets at present available for Africans anywhere" and one "which will enable the African workers to do the heavy underground work, yet which is at the same time sufficiently related to their own home diet to make them satisfied with it". Its minimum is defined by Government regulations providing for a daily ration of 24 ounces mealie meal, 6 ounces bread, 3 ounces beans or peas, 2 ounces ground nuts or ½ ounce additional animal or vegetable fat and 5 ounces fresh vegetables, a weekly ration of 3 lb. meat and ¾ lb. soup meat and salt and coffee or cocoa.

Dr. Orenstein describes the preparation and distribution of rations as follows.

The food is cooked in a central kitchen in steam-jacketed pots. It consists of a meat stew, which is really a thick soup, the ingredients

¹ E. B. Worthington: "On the Food and Nutrition of African Natives", in Africa, April 1936.

² A. W. Hoernlé, in Africa, April 1936, p. 224.

of which are meat, peas or beans, whole maize, ground nuts and vegetables, sometimes with macaroni. For fish eaters, fish is provided. In addition, the Natives receive a portion of mealie porridge. The principal meal of the day is after returning from work between 3 p.m. and 6 p.m.

The vast majority of the Natives have to be at the shaft heads about 4 a.m. Until recently very little was done to provide them with a suitable early morning meal partly because there is a prevalent belief that Natives do not care for food early in the morning, partly because of the disinclination of Natives to rise earlier than absolutely necessary, but perhaps principally because of the difficulty of distributing food so early in the day. In the course of the last year or two, however, propaganda was instituted to encourage the issue of a substantial break-Various experiments were carried out to find an acceptable and dietetically satisfactory meal and the number of Natives taking the early morning meal is now very considerable. The weekly meat ration is issued uncooked to each Native, usually 1 lb. on alternate days; and the Natives roast or grill it over the coal fires in their rooms. Kafir beer with a low alcoholic content is issued in small rations twice a week, and a mealie meal drink daily. The quantity of food issued to any one Native is not restricted and each one may ask for as much as he can consume.

By buying in very large quantities the mines are enabled to provide this diet at a relatively low cost, the total cost of the uncooked ingredients per Native per day being approximately 4d.

Dr. Orenstein claims, as a practical indication that the ration is generally speaking adequate, the fact that the vast majority of Natives gain in weight whilst in employment and that diseases due to dietetic insufficiencies are extremely rare. Mortality from disease has dropped in 20 years from over 30 per thousand to under 9 per thousand.

In the Katanga Province of the Belgian Congo the ration scale is fixed as follows:

| Proteins | 100 | grammes |
|---------------------------|-----|---------|
| Carbohydrates | 600 | ,, |
| Fat | 75 | ,, |
| Vegetables or fresh fruit | 150 | ,, |
| Salt | 15 | ,, |

On this basis the Union Minière du Haut Katanga has fixed a weekly ration scale in grammes, which for purposes of comparison has been here reduced to the same periodicity as on the Rand and roughly to the same avoirdupois weights. The daily ration works out at 25 ounces maize, 7.5 ounces sweet potatoes, 2.5 ounces vegetables and fruit, 1 ounce palm oil, 0.75 ounces ground nuts, 0.55 ounces salt and 0.25 ounces sugar, plus 3 lb. meat weekly. The underground workers on the Prince Léopold mine obtain on leaving work a meal of meat soup and flour for which an extra flour allowance is granted, and before descending the mine receive extra allowances of bread and coffee, and in the case of the morning shift ground nuts.

These scales may be compared with the Kenya Medical Department's attempt to translate into local terms a basic ration established

by the Nutrition Committee of the British Medical Council. This basic ration would consist daily of approximately 18 ounces maize meal, 8 ounces potatoes, 2 ounces beans, 2 ounces ghee, 2 ounces sugar, 4 ounces vegetables, together with salt and tea and a weekly ration of 2 lb. meat.

PROBLEMS OF ADMINISTRATION AND EDUCATION

Some of the administrative problems which require investigation are suggested in the following practical proposals made by Dr. Trolli in his study on the Congo:

- "1. Rations are not compulsory for women and children. They should be.
- 2. The Provincial Governors should not be authorised to fix rations and their delegates still less. The Governor-General should fix a standard ration and the Provincial Governors lay down tables of equivalencies.... For this purpose laboratories should be set up in each province....
- 3. The quality of the foodstuffs should be supervised.... A complete review should be made of the laws relating to the adulteration of foodstuffs. The proper warehousing and transport of food by dealers should be enforced and the food inspection service extended....
 - 4. A technical nutrition service should be established. . . .
- 5. In acclimatisation camps, recruits should be progressively habituated to the new food.
- 6. A hot meal should be supplied to workers who are unable to leave their work during employment or who, owing to the distance of employment from the camps, are unable to spend at least one hour in the camps to prepare their food....

An uninterrupted working day of 8 hours as practised in some employments is extremely harmful....

7. If rations are replaced by a cash allowance there should be intensive agricultural and nutritional propaganda."

The experience in the other centre of high nutritional standards which has been mentioned, the Rand mines, suggests the educational work which is still necessary. Dr. Hoernlé reports as follows on the question of the morning meal which has been mentioned above. "As a medical man, Dr. Orenstein is very much concerned about the time of the daily meal, and he has been experimenting for a long time with methods of inducing the Africans to take a proper breakfast before going on shift. The difficulty is the early hour at which they have to go to the shaft-head to be ready to descend to the working-face. The men are awakened at 3-4 in the morning to go to the shaft-head, and they object to rising any earlier in order to get a meal before going down. In one experiment Dr. Orenstein made at a mine with 5,000 men only 200 on an average took advantage of the morning meal provided. Some of the men dislike taking food down the mine to eat; they say it is not healthy to eat down in the darkness underground. Nevertheless, experiments are being continued with various types of food, polonies, hot and very sweet cocoa, coffee, etc., and Dr. Orenstein assures me that

he thinks in the near future all mine Natives, in addition to the food already given, will be receiving a strengthening meal."

The Rand and Congo experience should in addition be of educational value to employers. A representative of the Ross Institute of Tropical Hygiene who recently visited East Africa suggests that for several medical reasons, including poverty of diet and the fact that food values are unsuited, it is not surprising that the tasks accomplished on some African estates are one-sixth of those accomplished by Asiatic labourers. Similarly, a recent report on nutrition in Tanganyika ¹ finds it necessary to state that "there is not the slightest doubt that a large percentage of illness suffered by Natives employed on estates can be traced to inadequate and unbalanced dietaries. Food defficiency nearly always plays a part not only in the production of ulcers and scurvy, but numerous other diseases which cause wastage of labour."

These points suggest the value of further investigation into nutrition in the chief centres of African employment, of an interchange of information on the results obtained between areas where detailed research is possible, and of the communication of this information to areas where the influence of diet on social welfare and labour efficiency is not fully realised.

Occupational Anthrax in Germany in 1933 and 1934

According to statistics published by the German Federal Office of Health ², 84 cases of anthrax, 12 of which were fatal, were notified to that Office in 1933, and 68, 10 of which were fatal, in 1934.

The distribution by sex of these cases was as follows: 1933: males 75 (11 fatal), females 8, and 1 child (a fatal case of a six-year-old boy); 1934: males 57 (8 fatal), females 10 (one fatal), and 1 child (a fatal case of a three-year-old girl).

Among these totals, there were 2 cases of internal anthrax in 1933 and 1 in 1934.

The bacteriological examination was positive in 47 cases (55 per cent.) in 1933, and in 38 cases (55.9 per cent.) in 1934.

¹ TANGANYIKA TERRITORY: The Tribes of Tanganyika, their Districts, Usual Dietary and Pursuits. Dar-es-Salaam, Government Printer, 1936.

² "Ergebnis der Statistik über Milzbrandfälle unter Menschen im Deutschen Reiche für das Jahr 1933 mit einem Nachtrag für 1932", and ditto for 1934, in Reichsgesundheitsblatt, Vol. X, No. 1, 4 Jan. 1935, pp. 8-10, and Vol. XI, No. 22, 27 May 1936, pp. 436-438.

For statistics for 1931 and 1932, cf. International Labour Review, Vol. XXVIII, No. 3, Sept. 1933, pp. 395-397.

After the publication of the report for 1932, a further case was notified, so that the total number for that year was 83 instead of 82. The case was fatal, the victim being a meat examiner.

DISTRIBUTION OF CASES BY CAUSE

The cases were distributed by cause roughly as follows: 1933: contact with infected animals, 48 cases (5 fatal); industrial anthrax, 25 cases (5 fatal); miscellaneous, 11 cases (2 fatal); 1934: agricultural anthrax, 33 cases (4 fatal); industrial anthrax, 24 cases (4 fatal); miscellaneous, 11 cases (2 fatal).

The cases of agricultural anthrax were distributed as follows in 1934: agricultural work, 1 case (due to cattle); contact with infected animals, 32 cases, 4 of which were fatal.

The cases of industrial anthrax were caused by transport of, commerce in, or working with hides and skins (14 cases, of which 5 were fatal, in 1933; 13 cases, 1 fatal, in 1934), or hair and bristles (11 cases, none fatal, in 1933; 11 cases, 3 fatal, in 1934).

Of the 11 miscellaneous cases in 1933, one was of occupational and the remaining 10 (including 2 fatal cases) of non-occupational origin. In 1934, too, 1 of the miscellaneous cases was of occupational and the remaining 10 (2 fatal) of non-occupational origin.

Contact with Infected Animals

In 1933 and 1934 the urgent slaughtering of diseased animals gave rise to 42 cases (4 fatal) and 26 cases (3 fatal) respectively; the handling of carcases caused 6 cases (1 fatal), in each of the two years in question.

All these were cases of cutaneous anthrax, except 1 in 1934 (a fatal case of internal anthrax).

The seat of the infection was as follows: 1933: arms, 41 cases; head, 5; elsewhere, 2; 1934: arms, 25 cases; head, 6; internal anthrax, 1.

The animals to which infection was due were as follows: cattle, 46 cases in 1933 and 30 in 1934; sheep, 2 in 1933 and 1 in 1934; swine, 1 in 1934.

Hides and Skins (Transport, Commerce, and Working)

The 14 cases (5 fatal) reported in 1933 as due to transport of, commerce in, and working with hides and skins were distributed as follows: dock and transport workers, 2 cases (1 fatal); tannery workers, 11 (3 fatal); shoe factory worker, 1 case (fatal). The 13 cases notified in 1934 affected dock and transport workers in 7 cases (1 fatal) and tannery workers in 6 cases.

The seat of the infection was as follows: 1933: head, 8 cases; arms, 4; chest, 1; internal anthrax (tonsil and intestine), 1; 1934: head, 10; arms, 3.

The cases were distributed as follows according to the materials handled: 1933: dry hides, 6 cases; salted hides, 1; salted and dry hides, 2; not indicated, 4; leather, 1. They were due to cattle hides (7 cases), goat skins (2), sheep skins (1), sheep and goat skins (1), sundry hides and skins (1), leather (1), while in 1 case the cause of infection could not be ascertained. The raw materials came from

South America (4 cases), Africa (2), Argentina (1), India (1), and China (1); in 5 cases the origin was not known.

In 1934 the distribution was as follows: dry hides, 7 cases; salted hides, 2; miscellaneous hides, 2; cattle hairs, 1; a bale of cotton infected by a hairy cattle skin from Chile, 1 (a transport worker). These cases were due to cattle skins (8 cases), goat skins (3), sheep skins (1); and bales of cotton (1). The raw materials came from South America (1 case), Argentina (4), Bolivia (1), Chile (1), China (3), and Spain (1); no information was supplied in 2 other cases.

Hairs and Bristles (Transport, Commerce, and Working)

The 11 cases of anthrax reported in 1933 as due to the transport of, commerce in, and working with hairs and bristles occurred in the following industries and operations; preparation of horsehair, 5 cases; manufacture of brushes and paint-brushes, 4 cases; manufacture of carpets, 2 cases.

Of the 11 cases reported in 1934, 4 occurred in the preparation of horsehair, 1 (fatal) in the preparation of badger hair, 4 (1 fatal) in the manufacture of brushes and paint-brushes, 1 (fatal) in the manufacture of carpets, and 1 in the manufacture of felt goods.

The seat of infection was as follows: 1933: head, 8 cases; arms, 2; no information, 1; 1934: head, 8; arms, 3.

In 1933 the materials handled were as follows: horse products (5 cases), goat and horse hair (1), goat and cattle hair (1); rag pulling caused 1 case and the handling of plant fibres 3. The materials came from "abroad" (2 cases), China (1), and the U.S.S.R. (2); in 2 cases the place of origin was unknown and in 4 no information was supplied. In 6 cases the raw materials had been wholly or partly disinfected.

In 1934 the materials were products of horses (3 cases), badgers (1), sheep (2), goats (2), swine (2), and cattle and horses (1). Their origin was as follows: "abroad" (2 cases), Siberia (1), Turkey (1), Germany and abroad (4), unknown (1), no information (2).

Miscellaneous

In 1933, the 1 miscellaneous occupational case (anthrax of the arm) occurred to a worker engaged in cleaning out the bed of a river. The other 10 (2 of them fatal, including 1 case of internal anthrax in a child aged 6), were non-occupational; no information regarding their causes was given.

In 1934, too, one miscellaneous case (anthrax of the head) was of an occupational nature, occurring to an agricultural inspector. The 10 others (2 fatal) were non-occupational; the infection was traced to the use of shaving-brushes (1 case), the cleaning of clothes (1), insect stings (2), and the hide used for a knapsack (1); in 5 cases no information regarding causes was given.

Native Labour in the Rhodesias

Two recently published reports on Native affairs during 1935 in Northern and Southern Rhodesia contain information on the problems arising out of the increased demand for labour in Southern Africa. ¹

LABOUR DEMAND

In Northern Rhodesia it is estimated that on an average 66,702 Africans were in employment within the territory during 1935. For 1933 the figure was 39,359. The increased figure, however, has not reached the 1931 peak of 79,165 and it appears that the territory is destined for some time to have a surplus of labour. A monthly average of 18,464 Africans were employed on the mines, as compared with 16,598 in 1934, but the demand will probably decrease as construction work is now completed on the copper belt, where there is already estimated to be a floating population of 5,000 seeking work. Other important centres of employment are the saw-mills and farming areas.

In Southern Rhodesia, on the other hand, there is an increased demand for labour which cannot be met from local supplies. In 1935 an average of 204,622 Africans were in employment, as compared with 184,081 in 1934. Mining employment figures increased from 62,113 to 77,383. The labour demand is largely met from outside Southern Rhodesia. Of the total number of Natives in employment, 120,984 were from other territories. The mines in particular are dependent on outside supplies. Of the average of 77,383 employed during the year, 22,759 only were from Southern Rhodesia; 25,771 came from Nyasaland; 20,168 from Northern Rhodesia; 7,110 from Portuguese East Africa; and 1,575 from other sources.

Since the preparation of the Southern Rhodesia report under review, the difficulty of satisfying the labour demand appears to have increased. At a meeting in June 1936 of the Rhodesian Small Workers' and Tributors' Association serious shortages were reported. It is also reported that the stringency is even greater among the farming community, and an indication of what is happening one of the biggest farmers in the Colony has stated that 40 Natives gave him notice and when offered an increase of 50 per cent. on their wages of 10s. and 12s. a month they still refused to remain.

LABOUR EMIGRATION

Southern Rhodesia appears to be feeling the increasing competition of the Rand as an employment centre. The Southern Rhodesia report estimates that over 8,000 Southern Rhodesian Natives proceed annually

¹ NORTHERN RHODESIA: Native Affairs. Annual Report for the Year 1935. Lusaka, Government Printer, 1936.

SOUTHERN RHODESIA: Report of the Chief Native Commissioner for the Year 1935. Salisbury, Government Stationery Office, 1936.

to the Union and that probably not less than 4,000 alien Natives pass through on their way. More recent reports suggest that there is an accentuation of this movement, and that alien Natives are even returning to their homes in the North in the expectation that this will lead to their being recruited for the Rand mines. ¹

In Northern Rhodesia with the absence of sufficient local employment the pressure to emigrate is greater and in some parts appears to give rise to a situation not dissimilar to that recently condemned in the neighbouring territory of Nyasaland. ²

The Northern Rhodesia report states that the Natives have to rely on the labour market as their main source of wealth and that it appears that out of a taxable male population of 288,000, close on 50,000 are at present in employment in neighbouring countries. Others are seeking work or are absent from their villages for other purposes, and the report assumes that well under 50 per cent. of the taxable males in the territory are at their villages at any one time.

The position is particularly difficult in the Eastern Province and the following is a summary of the comments of the Provincial Commissioner on this point.

He states that one District Commissioner reports that the stream of labour to the Southern Rhodesian markets is steadily increasing and that in large villages it is the exception to see more than half a dozen able-bodied men. Another District Commissioner refers to "symptoms of painful adolescence to be observed among the younger generation. . . . Not only is the old communal life ending, but the ties of family grow weaker and selfish individualism is rapidly becoming part of the African's character, to which it was so foreign only a few years ago. . . . Men stay away from their villages for increasingly long periods and in greater numbers. Women, particularly young women, are eager to savour the delights of life in compounds and every lorry is laden with women travelling to the labour centres where they have more chance of marriage than they find in the villages denuded of menfolk, but more frequently contract promiscuous alliances which are no more than prostitution." The Provincial Commissioner suggests that any such summary of the situation is perhaps unduly pessimistic. It is possible that the Native who returns from distant employment has learnt lessons of discipline and cleanliness which he will pass on to his own community. "The extent of the length of absence is what especially counts: the continued absence of the more virile element of the community without any periodical personal contract with home life undoubtedly has a disturbing effect on the tribal areas, but it is fortunate that home ties remain strong with the majority so that the cumulative effect on village life of the exodus to work is less disastrous than might be expected."

¹ According to the *Rhodesia Herald* of 5 June 1936, one farmer was told by a Nyasaland Native that his chief was ordering all his men to return home at the expiration of their contracts as he received a bounty for all boys whom he sent to the Union.

² Cf. International Labour Review, Vol. XXXIII, No. 6, June 1936, pp. 849-861.

LABOUR CONDITIONS IN THE RHODESIAS

From both reports it is clear that only by improved conditions of local employment can the loss of labour be checked.

The Chief Native Commissioner for Southern Rhodesia states that the time has come to take a long view of the labour problem based on the belief that the industries of the Colony are going to last. "We must, therefore, see to it that not only are wages fair and conditions of life good at our industrial centres and on farms, but that the homes from which our immigrant labourers come are not broken, but strengthened by the temporary and remunerative absences of the men. Among our 83,865 immigrants this year, there were only 9,831 reentrants. We can better that proportion. Among certain adverse comments from Native Commissioners illustrative of the shortsightedness of employing Native labourers on terms solely based on the laws of supply and demand, one finds also the following statement: 'Native employees on the . . . Mine are extraordinarily well looked after, and they are provided with the best medical facilities. Conditions are excellent, and the management shows a live interest in the welfare of its Native employees. '"

In the Northern Rhodesian report attention is drawn to housing conditions and to rates of wages. On the copper mine locations housing conditions are said to be satisfactory. Some of the locations managed by the towns, however, are inadequate and for the Eastern Province it is stated that, generally speaking, the accommodation provided for Native labour is poor and inadequate, and that regulations governing the matter are seldom enforced. Wages on farms are mentioned as ranging from 5s. to 7s. 6d. a month with food or a ration allowance of 2s. a month. The report on the Eastern Province, where, as has been noted, some 50 per cent. of the able-bodied men seek work abroad, records numerous complaints by planters during the year that labour was unobtainable and suggests that the low rate of pay coupled with too prevalent unsatisfactory housing conditions may account for the planters' difficulty.

STATISTICS

Unemployment

The following table gives statistics on the general level of unemployment; figures for the different industries and occupations covered by these series will be found in the Year-Book of Labour Statistics, 1935-36, which also gives separate figures for males and females where available.

If not otherwise stated, the figures relate to persons recorded as wholly unemployed, and in most cases fall far short of the reality. Their principal value is in indicating the fluctuations from time to time, and only between such movements are international comparisons possible; the various series are not equally sensitive to changes on the labour market and an equal change in any two series does not necessarily represent a corresponding change in the countries concerned. Moreover, changes in legislation, in administrative practice, in the frequency of registration of the unemployed, in the amount of "short time" worked, and in "normal" hours often result in a decrease (or increase) in the recorded level of unemployment which does not correspond to changes in employment. Percentages are, however, more reliable than absolute numbers as measures of changes in the level of unemployment. Where available, figures of "partial unemployment" are also given, but they are uncertain, incomplete, and based on different definitions; thus here, too, international comparisons are not possible.

The principal problems of these statistics are examined in other publications of the Office¹; for figures based on unemployment insurance statistics additional information as to the scope and working of these schemes will be found in a special study by the Office.²

EXPLANATION OF SIGNS USED IN THE TABLES

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The sign * signifies: "no figures exist".

""", """, """, """ provisional figure".

""", """, """, """ figure revised since the previous issue".

Figures in thick-faced type: base of the index numbers.
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Figures in italics: index numbers with a year other than 1929 as base.

The sign — between two figures of a series signifies that the former series is replaced by another, or otherwise modified.

¹ Methods of Statistics of Unemployment; Studies and Reports, Series N, No. 7; Geneva, 1925. Report on the Proceedings of the Second International Conference of Labour Statisticians (containing resolutions on the best methods of compiling unemployment statistics); Studies and Reports, Series N, No. 8; Geneva, 1925.

² Unemployment Insurance and Various Forms of Relief for the Unemployed. International Labour Conference, Seventeenth Session, Geneva, 1933.

STATISTICS OF UNEMPLOYMENT

| | | | GERMANY | | Austr | ALIA | | Austr | IA | Bulgaria* |
|----------|-------------------------|-------------------------------------|--|--------------------|--------------------|----------------|-------------------------------|----------------------|--------------------------------------|----------------------------|
| D: | ate | Employmen | t exchange st | atistics | Trade u retur | | Unemplo insura statis | nce | Employment exchange statistics | Official estimates |
| | | Applicants for work | Unemplo register | | /Unemp | loyed | Unemp in receipt o | | Applicants for work | Number unem- |
| | | registered | Number | Per cent. | Number | Per cent. | Number | Per cent. | registered | ployed |
| |)27)28 | : | 1,353,000 ¹ 1,353,000 ³ | : | 31,032 45,669 | 7.0 10.8 | 172,450 156,185 | 13.6 12.1 | 200,112 182,444 | : |
| 19 | 929 | 1,919,917 ¹ 3,130,082 | 1,891,956 3,075,580 | : | 47,359 84,767 | 11.1 19.3 | 164,509 208,389 | 12.3 15.0 | 192,062 242,612 | |
| 19 19 | 931 932 | 4,618,537 5,703,088 | 4,519,704 5,575,491 | 23.7 30.1 | 117,866 120,454 | $27.4 \\ 29.0$ | 253,368 309,968 | 20.3 26.1 | 300,223 377,894 | 22,153 |
| 19 | 933 | 5,083,140 3,306,628 | 4,804,428 2,718,309 ⁴ | 25.8 14.54 | 104,035 86,865 | 25.1 20.5 | 328,844 287,527 | 29.0 26.3 | 405,741 370,210 | 24,977 32,762 |
| 1935 | 935 Aug. | 2,567,523 ² 2,060,627 | 2,151,039 ² 1,706,230 | 11.6° 9.1 | 71,823 69,575 | 16.5 15.9 | 261,768 209,493 | 23.4 18.6 | 348,675 292,560 | 38,148 30,220 |
| | Sept. Oct. Nov. | 2,053,649 2,161,851 2,335,116 | 1,713,912 1,828,721 1,984,452 | 9.1 9.7 10.6 | 59,992 | * 13.7 | 204,908 214,094 242,759 | 18.1 19.0 21.4 | 289,944 301,790 335,552 | 30,171 35,440 42,760 |
| 1936 | Dec. | 2,836,291 2,880,373 | 2,507,955 2,520,499 | 13.7 13.5 | | * | 284,914 317,200 | 25.4 28.0 | 383,785 414,649 | 50,710 49,498 |
| Ì | Feb. March | | 2,514,894 1,937,120 | 13.5 10.3 | 59,621 | 13.4 | 321,529 298,714 | 28.3 26.1 | 415,803 392,223 | 52,521 50,710 |
| | April May June | 2,117,803 1,808,664 1,593,386 | 1,762,774 1,491,235 1,314,731 | 9.2 7.7 6.8 | 57,000† | 12.8 | 267,047 242,227 230,844 | 23.5 21.3 20.4 | 358,087 333,482 322,501 | 42,072 35,879 30,045 |
| | July Aug. | 1,429,656 | 1,169,860° 1,098,000† | 6.0† 5.6† | * | <u>*</u> | 221,323 217,991† | 19.6† 19.3† | 310,395 | 23,780 |
| Base | figure | • | 19,448,5 | 65† | 445,2 | 94† | 1,129, | 109† | * | * |

¹ Average for 11 months. ² Since March 1935 including the Saar Territory. ³ Figures calculated by the Institut für Konjunkturjorschung. ⁴ Since 31 July 1933 not including persons employed in labour camps. ⁵ The figures relate to the 1st of the following month.

| | | | BELGIUM | | | CANA | ADA . | CHILE |
|--------------|-------------------|----------------|---------------------------|--|--------------------|---------------------------|------------------------|------------------------|
| | Un | employn | nent insurance | statistics | Trade u | | Employment exchange | Employment exchange |
| Date | Perce | | Unemployed | Days of un- | 1000 | Inemployed | | statistics |
| | unemp | loyed 1 | (daily average during the | employment | Unemp | | | Applicants for |
| | Wholly | Par- tially | month) | per month a | Number | Per cent. | | work registered |
| 1927 | 1.8 | 3.9 | 16,103 | 361,185 | 8,142 | 4.9 | 13,541 | * |
| 1928 | 0.9 | 3.5 | 11,317 | 253,848 | 8,120 | 4.5 | 12,758 | * |
| 1929 | 1.3 | 3.0 | 12,636 | 283,434 | 11,488 | 5.7 | 14,966 | |
| 1930 | 3.6 | 7.9 | 36,102 | 809,775 | 22,873 | 11.1 | 33,008 | * |
| 1931 | 10.9 | 16.9 | 110,392 | 2,476,071 | 33,625 | 16.8 | 71,385 | 29,345 |
| 1932 | 19.0 | 20.7 | 210,575 | 4,723,170 | 38,777 | 22.0 | 75,140 | 107,295 |
| 1933 | 17.0 | 17.2 | 210,007 | 4,710,445 | 33,488 | $\frac{22.3}{18.2}$ | 81,809 | 71,805 30,055 |
| 1934 | 19.0 | 17.2 | 234,730 | 5,264,969 | 28,320 | | 88,888 | |
| 1935 | 17.9 | 12.8 | 211,536* | 4,831,482 | 25,336 | 15.4 | 84,050 | 10,672 |
| 1935 Aug. | 14.9 | 11.7 | 180,339 | 4.105,503 | 23,640 | 14.2 | 71,114 | 7,848 |
| Sept. | 14.9 | 11.9 | 174,806 | 3,876,191 | 21,759 | 13.0 | 71,016 | 8,037 |
| Oct. | 14.5 | 10.6 | 166,042 | 4,205,665 | 22,583 | 13.3 | 78,312 | 8,288 |
| Nov. | 15.9 | 10.3 | 176,950 | 4,067,620 | 22,575 | 13.3 | 90,447 | 8,234 |
| Dec. | 18.1 ^r | 11.3 | 203,558 | 4,495,767 | 24,868 | 14.6 | 85,095 | 8,173 |
| 1936 Jan. | 18.6 | 11.1 | 206,625 | 4,724,361 | 24,830 | 14.8 | 92,247 | 8,766 |
| Feb. | 18.7 | 11.2 | 209,276 | 4,876,344 | 23,310 | 13.8 | 89,470 | 7,854 |
| March | | 10.5 | 170,759 | 3,981,164 | 24,384 | 14.5 | 92,588 | 7,117 7,043 |
| April | 13.1 | 11.2 | 155,322 | 3,639,044 | 26,312 | 15.1 14.8 | 92,112 | |
| Мау | 12.2 | 9.7 | 151,895 | 3,567,980 | 26,442 24,970 r | 14.8 13.9 ^r | 84,936 83,829 | 7,482 |
| June | 11.0 | 10.9 | 139,771 133,958 | _ | 22,375† | 12.5 | 83,304 | _ |
| July Aug. | = | _ | | | | - | | |
| Base figure | <u> </u> | <u></u> | 913,862† | <u> </u> | 179,0 | 000† | | • |

² Having received a control card during the month. ³ Until April 1935, estimates. of 24 working days.

Standard month

STATISTICS OF UNEMPLOYMENT (cont.)

| | | £ |)BNMAF | ı K | DANZIG (Free City of) | Sp | AIN | | | Unit | ED STATES | |
|----------|------|---------|--------------|-----------------------------|-----------------------------|----------------|------------------------|---------------------|-----------------|------------------|--------------------------------------|-----------------------------|
| | Ì | Trade u | | Employ- ment exchange | Employ- ment exchange | excl | Employment exchange | | de un return | | Estimates (American Federation | Employ- ment exchange |
| Dat | e | | | statistics | Statistics | stat | istics | | rcenta mploy | | of Labour) | statistics |
| | | Unempl | oyed | Appli- cants | Unem- | Unem | ployed | 39 . 7 44. 4 | | ighted | Number | Appli- cants for |
| | | Number | Per cent. | for work registered | ployed registered | Wholly | Partially | Weighted | Wholly | Par- tially | unem- ployed | work registered |
| 192 | 7 | 61,705 | 22.5 | 65.620 | • 1 | * | | • | | • | | |
| 1928 | 8 | 50,226 | 18.5 | 51.864 | 1 • 1 | | | 9.2 | 13 | | * | * |
| 1929 | | 42,817 | 15.5 | 44,581 | 12,905 | 1 • | | 8.2 | 12 | • | 1.864,000 | * |
| 1930 | | 39,631 | 13.7 | 40,551 | 18,291 | l • | • | 14.5 | 21 | * | 4,770,000 | * |
| 1931 | | 53,019 | 17.9 | 59,430 | 24,898 | • | * | 19.1 | 26 | 19 | 8,738,000 | * |
| 1932 | | 99,508 | 31.7 | 126,039 | 33,244 | | * | 23.8 | 32 | 21 | 13,182,000 | • |
| 1933 | | 97,478 | 28.8 | 121,115 | 31,408 | | | 24.3 | 31 | 21 | 13,723,000 | * |
| 1934 | - 1 | 81,756 | 22.1 | 97,595 | 20,326 | 381,278 | 240,541 | 20.9 | 26 | 24 | 12,364,000 | • |
| 1935 | 5 | 76,195 | 19.7 | 92,406 | 17,983 | 434,931 | 262,059 | 18.5 | 23 | 22 | 12,208,000 | 7,422,615 |
| 1935 At | ug. | 53,041 | 13.7 | 68.478 | 14,445 | 415.120 | 275.985 | 18.4 | 23 | 23 | 12.219.000 | 8,234,933 |
| | pt. | 57,923 | 14.9 | 71,582 | 14,610 | 449,820 | 269,593 | 17.9 | 20 | 21 | 11,789,000 | 8,696,821 |
| 00 | ct. | 67,390 | 17.3 | 80,812 | 16,447 | 486,635 | 293,607 | 17.3 | 20 | 21 | 11,449,000 | 8,735,671 |
| | ov. | 84,907 | 21.7 | 100,077 | 19,213 | 508,783 | 297,438 | 16.7 | 20 | 22 | 11,672,000 | 8,387,179 |
| | BC. | 124,612 | 31.7 | 140,037 | 21,039 | 416,198 | 257,963 | 16.9 | 23 | 22 | 11,397,000 | 8,954,017 |
| 1936 Ja | | 111,898 | 27.7 | 131,013 | 19,746 | 457,458 | 291,352 | 17.2 | 22 | 22 | 12,646,000 | 9,010,309 |
| | eb. | 120,907 | 30.0 | 139,716 | 20,959 | ! - | _ | 16.7 | 22 | 21 | 12,570,000 | 9,196,423 |
| | arch | 104,644 | 25.9 | 125,607 | 18,066 | l — | - | 16.2 | 21 | 21 | 12,183,000 | 9,252,488 |
| | pril | 77,915 | 18.9 | 93,044 | 16,560 | · — | - | 15.1 | 18 | 21 | 11,503,000 | 8,996,649 |
| Ma | | 52,924 | 12.8 | 65,748 | 14,966 | — | | 13.7 | 17 | 22 | 11,259,000 | 8,786,138 |
| | ine | 46,513 | 11.2 | 57,846 | 11,890 | - | | 12.8 | 17r | 23 | 11,138,000 | 6,666,599 |
| Ju | | 50,824† | | 61,285 | 8,619 | | | 12.4† | 17† | 19 | _ | ı — |
| Al | ug. | 50,771† | 12.27 | 61,432 | - | - | | — _ | | - | / <i>-</i> | ! - |
| Base fig | rure | 416,27 | 0 t. | • | • | * | * | 8 | 64,000 | | • | . * |

¹ Unemployed occupied on public and civil works excluded.

² Including those employed on public works, etc.

| | ESTONIA 1 | Fin | LAND | FRA | NCB | GREAT BRIT | AIN AND | Northern Is | RELAND |
|-------------------|-------------------------------|-------------------------------|--|---|-------------------------------|------------------------|--------------|---|--------------|
| Date | Employ- ment exchange | Employ- ment exchange | Statistics of local unemployment | Public relief fund statistics | Employ- ment exchange | Unemplo | yment i | nsurance stati | istics |
| | statistics | statistics | committees | | statistics | Wholly une | | Unemployed owing to temporary stoppages | |
| | Unem- ployed registered | Unem- ployed registered | Unem- ployed | Unemploy- ed in receipt of relief | Applica- tions for work | Number | Per cent. | Number | Per cent. |
| 1927 | 2.957 | 1.868 | • | 33,549 | 47,289 | 899,093 | 7.4 | 263,077 | 2.3 |
| 1928 | 2,629 | 1,735 | * | 4,834 | 15,275 | 980,326 | 8.2 | 309,903 | 2.6 |
| 1929 | 3,181 | 3,906 | • | 928 | 10,052 | 994,091 | 8.2 | 268,400 | 2.2 |
| 1930 | 3,089 | 7,993 | * } | 2,514 | 13,859 | 1,467,347 | 11.8 | 526,604 | 4.2 |
| 1931 | 3,542 | 11,522 | • [| 56,112 | 75,215 | 2,129,359 | 16.7 | 587,494 | 4.6 |
| 1932 | 7.121 | 17,581 | 63,972 | 273,412 * | 308,096 | 2,272,590 | 17.6 | 573,805 | 4.5 |
| 1933 | 8,207 | 17,139 | 44,656 | 276,033 | 307,844 | 2,110,090 | 16.4 | 456,678 | 3.5 |
| 1934 | 2,970 | 10,011 | 23,802 | 345,033 | 376,320 | 1,801,913 | 13.9 | 368,906 | 2.9 |
| 1935 | 1,779 1 | 7,163 | 13,362 | 426,931 r | 465,875 * | 1,714,844 | 13.2 | 312,958 | 2.3 |
| 1935 Aug. | 592 | 4,003 | 4,684 | 380,664 | 415,964 | 1,605,036 | 12.3 | 344,767 | 2.6 |
| Sept. | 593 | 4,755 | 5,786 | 373,446 | 408,426 | 1,644,723 | 12.6 12.7 | 308,011 243,644 | 1.9 |
| Oct. | 977 | 6,446 | 9,739 | 385,330 | 427,672 | 1,658,720 1,679,912 | 12.7 | 243,644 | 1.7 |
| Nov. | 1,717 | 8,538 | 14,841 17,778 | 409,466 439,782 | 453,838 481,099 | 1,648,256 | 12.6 | 209,983 | 1.6 |
| Dec. 1936 Jan. | 2,007 | 7,427 10,117 | 19,912 | 477.173 | 522,634 | 1,780,412 | 13.6 | 350,822 | 2.7 |
| Feb. | 2,316 2,101 | 8,257 | 20,591 | 487,374 | 528,624 | 1.752.279 | 13.4 | 264,299 | 2.0 |
| March | 1,791 | 6,687 | 18,665 | 465,127 | 508.921 | 1,638,720 | 12.5 | 240,092 | 1.9 |
| April | 1,274 | 5,836 | 13,323 | 443,245 | 488.178 | 1.555.829 | 11.9 | 251,667 | 1.9 |
| May | 582 | 2,795 | 8,182 | 422,036 | 465,089 | 1,467,097 | 11.2 | 229,823 | 1.8 |
| June | 365 | 1,877 | 2,409 | 419,887 | 459,368 | 1,401,665 | 10.7 | 305,875 | 2.4 |
| July | 352 | 2,129 | 1,647 | 420,776 | 466,124 | 1,357,343 | 10.4 | 302,271 | 2.3 |
| Aug. | 476 | | - | 413,351 | 458,543 | ' | - | <u> </u> | - |
| Base figure | | • | • | • | • | | 13,058, | 000 | |

¹ Until December 1934, the figures relate to the 1st of the following month. applicants for work registered; the figures relate to the end of the month. including unemployed in receipt of relief from the public charitable offices.

Since January 1935
 From July 1932 onwards,

STATISTICS

STATISTICS OF UNEMPLOYMENT (cont.)

| | GREAT BRITAIN | Hungary | NETHERLANDS EAST INDIES | IRISH FRE | E STATE | ITALY | JAPAR | 1 1 |
|-------------|--------------------------------------|--|--------------------------------------|--|----------|----------------------|-------------------|--------------|
| | Employment exchange | Employment exchange | Employment exchange | Employ exchange | | Social insurance | Official estimate | |
| Date | statistics | statistics | statistics | Applicants registe | | fund statistics 4 | Unemp | loyed |
| | Applicants for work registered | Applications for work registered | Applicants for work registered | With claims to unem- ployment benefit | Total | Wholly unemployed | Number | Per cent. |
| 1927 | 1,091,271 | . 13,881 | • • | 13,728 | 21,284 | 278,484 | • | |
| 1928 | 1,246,022 | 14,715 | * | 14,821 | 22,487 | 324,422 | | * . |
| 1929 | 1,237,880 | 15,173 | • | 14,679 | 20,702 | 300,786 | * | • |
| 1930 | 1,953,935 | 43,592 1 | * | 16,378 | 22,398 | 425,437 | 369,408 | 5.3 |
| 1931 | 2,636,805 | 52,305 | 6,964 | 17,852 | 25,230 | 734,454 | 422,755 | 6.1 |
| 1932 | 2,744,789 | 66,235 | 10,922 | 20,217 | 62,817 | 1,006,442 | 485,681 | 6.8 |
| - 1933 | 2,520,616 | 60,595 | 14,576 | 19,897 | 72,255 | 1,018,955 | 408,710 | 5.6 |
| 1934 | 2,159,231 | 52,157 | 15,784 | 20,558 | 103,671 | 963,677 | 372,941 | 5.0 |
| 1935 | 2,036,422 | 52,048 | 17,418 | 18,410 | 119,498 | * | 356,103 | 4.6 |
| 1935 Aug. | 1,947,964 | 46,480 | 17,889 | 15,767 | 82,697 | 628,335 | 346.758 | 4.5 |
| Sept. | 1,958,610 | 48,707 | 18,366 | 15,627 | 83,191 * | 609,094 | 348,229 | 4.5 |
| Oct. | 1,916,390 | 52,331 | 18,247 | 17,324 | 123,705 | · • | 346,870 | 4.5 |
| Nov. | 1,918,562 | 52,674 | 19,524 | 17,407 | 129,403 | | 351,469 | 4.5 |
| Dec. | 1,868,565 | 52,225 | 18,831 | 19,246 | 133,319 | · (| 359,636 | 4.6 |
| 1936 Jan. | 2,159,722 | 57,916 | 19,236 | 21,382 | 144,764 | * | 357,736 | 4.6 |
| Feb. | 2,025,021 | 57,199 | 20,177 | 20,136 | 141,858 | | 356,613 | 4.6 |
| March | 1,881,531 | 58,177 | 20,182 | 17,117 | 123,336 | ! ! ! | 343,426 | 4.4 |
| April | 1,831,230 | 54,421 | 20,042 | 14,679 | 116,621 | | _ | - |
| Мау | 1,705,042 | 52,932 | 19,841 | 13,555 | 109,185 | | - | _ |
| June | 1,702,676 | 47,738 | II — | 13,589 | 70,274 | [| _ | _ |
| July | 1,652,072 | |)) — | 14,035 | 68,959 |] [|] | |
| Aug. | 1,613,940 | | 11 - | 13,973 | 67,045 | | _ | - |
| Base figure | | | * | • | | • | 7,778 | ,498† |

¹ Since January 1930, including non-fee-charging private employment agencies.
See note in Review for November 1935, p. 694.
The figures relate to the 1st of the following month.

| | LATVIA | MEXICO | | Norway | | NEW ZEALAND | PALESTINE | PORTUGAL |
|-------------|---|-----------------------|---------------------|-----------|--|--------------------------------------|----------------------------|---|
| Date | Employ- ment exchange statistics | Official estimates | Trade unic retur | | Einploy- ment exchange statistics | Employment exchange statistics | Official esti- mates | Employ- ment exchange statistics |
| | Applica- | Number | Unemp | loyed | Un- | Unemployed | Number | Un- |
| | tions for work registered | unem- ployed 1 | Number | Per cent. | employed * | (men) registered | unem- ployed | employed registered |
| 1927 | 3,131 | • - | 8,561 | 25.4 | 23,889 | • | * | |
| 1928 | 4,700 | | 6,502 | 19.2 | 21,759 | • | • | • |
| 1929 | 5,617 | • | 5,902 | 15.4 | 19,089 | 2,895 | 3,104 | |
| 1930 | 4,851 | 75,6951 | 7,175 | 16.6 | 19,353 | 5,003 | 4,833 | i * |
| 1931 | 8,709 | 257,979 | • | 22.3 | 27,479 | 41,430 4 | 24,083 | |
| 1932 | 14,587 | 339,378 | 14,790 | 30.8 | 32,705 | 51,549 | 18,239 | 33,352 |
| 1933 | 8,156 | 275,774 | 16,588 | 33.4 | 35,591 | 46,971 * | 18,370 | 25,255 |
| 1934 | 4,972 | 234,538 | 15,963 | 30.7 | 35,121 | 39,235 | | 34,711 |
| 1935 | 4,825 | 182,072 | 14,783 | 25.3 | 36,103 | 38,234 | • | 42,315 |
| 1935 ·Aug. | 1,595 | 165,293 | 11,846 | 19.7 | 28,281 | 42,745 | • | 42,363 |
| Sept. | 1,819 | 164,020 | 12,099 | 19.8 | 32,548 | 42,200 | • | 42,323 |
| Oct. | 2,334 | 152,172 | 13,264 | 21.2 | 36,549 | 39,681 | | 41,884 |
| Nov. | 6,347 | 145,418 | 14,000 | 22.0 | 39,270 | 35,979 | • | 41,002 |
| Dec. | 8,130 | 146,174 | 16,752 | 26.0 | 40,950 | 35,653 | | 41,119 |
| 1936 Jan. | 7,949 | 191,815 | 18,264 | 28.0 | 40,177 | 34,777 | | 41,660 |
| Feb. | 8,392 | 191,340 * | 17,627 | 26.7 | 40,263 | 32,384 | | 41,749 |
| March | 7,148 | 177,464 | 16,426 | 24.6 | 39,999 | 32,019 | | 41,872 |
| April | 4,450 | | 14,214 | 21.0 | 37,756 | 33,277 | 1 : | - |
| Мау | 1,840 | N — I | 10,858 | 15.7 | 30,923 | 35,270 | : | II — |
| June | 1,074 | 11 — I | - | _ | 26,139 | 39,038 | 1 - | — |
| July | 1,223† | | l | - | 22,145 | 42,939 | | - |
| Aug. | | <u> </u> | | | | | | |
| Base figure | * | • | 69,0 | 92 | * | • | * | • |

¹ Revised scries. ¹ Figure for the month of May according to the population census. relate to the 15th of the month. ⁴ Including persons employed on public relief works. ⁵ The figures do not always relate to the end of each month. ⁴ Average for eleven months.

STATISTICS OF UNEMPLOYMENT (cont.)

| | N | ETHERLA | NDS | Polai | 4D | RUMANIA 2 | | SWED | BN |
|-------------|------------------------------|-----------|---|-------------------------|-------------------|---|------------------|------------------------|--------------------------|
| Date | Unemplo insura statist | nce | Employ- ment exchange statistics | Employ: exchange s | ment tatistics | Employ- ment exchange statistics | | Trade union returns | |
| | Unemp | loyed | Un- employed | Application work region | | Un- employed | Unemp | loyed | Applicants for relief |
| | Number | Per cent. | registered | Number | Per cent. | registered | Number Per con | | registered |
| 1927 | 25,000 | 9.0 | * | 163,953 | 7.5 | • | 31,076 | 12.0 | 19,229 |
| 1928 | 20,300 | 6.8 | • | 125,552 | 5.0 | 10,373 | 29,716 | 10.6 | 16,662 |
| 1929 | 24,300 | 7.1 | • | 129,450 | 4.9 | 7,288 | 32,621* | 10.7 | 10,212 |
| 1930 | 37,800 | 9.7 | | 226,659 | 8.8 | 25,335 | 42,016 | 12.2 | 13,723 |
| 1931 | 82,800 | 18.1 | 138,200 | 299,502 | 12.6 | 35,737 | 64,815 | 17.2 | 46,540 |
| 1932 | 153,500 | 29.5 | 271,092 | 255,582 | 11.8 | 38,890 | 90,677 | 22.8 | 113,907 |
| 1933 | 163,000 | 31.0 | 322,951 | 249,660 | 11.9 | 29,063 | 97,316 | 23.7 | 164,773 |
| 1934 | 160,400 | 32.1 | 332,772 | 342,166 | 16.3 | 17,253 | 84,685 | 18.9 | 114,802 |
| 1935 | 173,673 | 36.3 | 384,691 | 381,935 | 16.7 | 13,852 | 81,385 | 16.1 | 61,581 |
| 1935 Aug. | 164,068 | 34.5 | 353,076 | 270,158 | 11.8 | 9.392 | 58,782 | 11.6 | 41,723 |
| Sept. | 166,474 | 35.4 | 366,045 | 254,704 | 11.1 | 9,071 | 62,338 | 12.3 | 41,190 |
| Oct. | 166,479 | 35.2 | 381,936 | 263,211 | 11.3 | 8,667 | 71,652 | 14,0 | 47,045 |
| Nov. | 173,262 | 36.6 | 415,180 | 308,916 | 13.4 | 11,034 | 82,789 | 16.2 | 54,167 |
| Dec. | 192,273 | 40.7 | 471,924 | 402,814 | 18.4 | 17,040 | 114,176 | 22.5 | 57,965 |
| 1936 Jan. | 200,319 | 42.6 | 475,890 | 472,004 | 21.0 | 22,247 | 100,241 | 19.3 | 61,400 |
| Feb. | 193,987 | 41.2 | 465,463 | 488,576 | 21.5 | 23,458 | 95,927 | 18.4 | 58,127 |
| March | 180,758 | 38.5 | 429,046 | 475,498 | 20.5 | 18,514 | 90,728 | 17.4 | 53,162 |
| April | 169,619 | 36.2 | 415,743 | 407,734 | 17.6 | 14,878 | 78,694 | 15.1 | 46,628 |
| Мау | 164,957 | 35.3 r | 392,884 | 343,043 | 14.8 | 12,923 | 58,529r | 11.2r | 34,571 |
| June | 157,142† | 34.21 | 378,796 | 314,014 | 13.5† | — | 51,670† | 10.1† | 25,863 |
| July | 161,965† | 35.4† | _ | ii — | _ | i | u — | - | <u> </u> |
| Aug. | | _ | | _ | - | _ | _ | - | _ |
| Base figure | 458, | 072† | • | 2,321 | ,932 † | | 509, | 605 † | 7594 † |

² Excluding agriculture.
² The figures relate to the 1st of the following month.
³ From 1929 onwards, including forestry workers and timber floaters.
⁴ Number of relief funds.

| | | SWITZE | RLAND | C | ZECHOSLOV | ARIA | YUGOSLAVIA |
|--|---|--|--|--|--|---|--|
| Date | Unempl insur stati | | Employment exchange statistics | Trade union fu return | nd | Employment exchange statistics | Employment exchange statistics |
| | | ntage ployed | Applications for work | | Unemployed in receipt of benefit | | Unemployed |
| | Wholly | Partially | registered | Number | Per cent. | for work registered | registered |
| 1927 1928 1929 | 2.7 2.1 1.8 | 2.0 1.1 1.7 | 11,824 8,380 8,131 | 17,617 16,348 23,763 | 1.6 1.4 2.2 | 52,869 38,636 41,671 | 5,721 8,370 |
| 1930 1931 1932 1933 1934 1935 | 3.4 ¹ 5.9 9.1 10.8 9.8 11.8 | 7,2 ¹ 12,1 12,2 8,5 6,1 5,9 | 12,881 24,208 54,366 67,867 65,440 82,468 | 51,372 102,179 184,555 247,613 245,953 235,623 | 4.5 8.3 13.5 16.9 17.4 15.9 | 105,439 291,327 554,049 738,310 676,994 686,269 | 8,198 9,930 14,761 15,997 15,647 16,752 |
| 1935 Aug. Sept. Oct. Nov. Dec. | 8.7 9.2 10.7 12.8 16.9 | 5.5 5.4 5.8 6.8 6.8 | 66,656 69,123 82,386 95,740 118,775 124,008 | 198,757 194,063 192,429 203,626 236,641 267,471 | 13.3 12.9 12.8 13.4 15.5 | 557,706 573,362 601,390 678,870 794,407 850,010 | 12,260 12,544 10,564 11,917 18,685 27,624 |
| 1936 Jan. Feb. Marcb April May June | 19.0 18.6 15.6 13.0 11.1 10.4 | 6.8 6.9 6.7 5.9 5.7 5.2 | 119,795 98,362 89,370 80,004 75,127 | 267,471 272,019 254,471 232,159 208,601 188,900 | 17.5 16.2 14.6 13.2 11.8 | 860,239 797,770 719,166 637,385 565,799 7 504,750† | 34,136 30,783 25,695 16,670 14,002 10,501 |
| July Aug. | = | = | 78,948 — | _ | 1 = | | 10,501 |
| Base figure | 495 | ,050 | * | 1,601,27 | 73 † | * | • |

¹ Up to 1929, quarterly statistics; afterwards, monthly statistics.

STATISTICS 387

Employment

The following table gives statistics on the general level of employment; figures for the different industries covered by these series will be found in the Year-Book of Labour Statistics, 1935-36.

According to their source the series in the following tables may be roughly classified in two groups: (1) those (the majority) based on employers' returns and indicating the changes in the number of workers employed or hours worked in a sample of mainly industrial establishments; these statistics do not furnish information on the absolute extent of employment, and as a rule index numbers only are reproduced here; (2) those based on returns of employed members in compulsory sickness or unemployment insurance schemes and covering the great majority of the working population; as these statistics give a more reliable picture of the fluctuations in the absolute extent of employment, absolute figures are generally given as well as index numbers.

In the great majority of cases the figures relate to workers recorded as in employment at a certain date, irrespective of the number of hours worked per day and per worker. In some cases, however, the statistics relate to the number of hours worked during a certain period of time, and in this case they record the fluctuations in the *volume* of employment.

Owing to the different scope of the various series and the different methods used in their compilation and classification, international comparisons of the absolute level of employment and its fluctuations are rarely possible. The chief value of the statistics, therefore, is in indicating the trend of short-time fluctuations in employment.

For explanation of the signs used in the table, see above, p. 382.

STATISTICS OF EMPLOYMENT 1

| | - | GERMANY | | AUSTRIA | Belgium | Bul | GARIA ⁶ | CANADA * |
|--------------------|-------------------------------------|-------------------------------|------------------|-------------------------------------|---|--------------------|--------------------|-----------------|
| | Sickness insurance statistics | Employer | s' returns | Sickness insurance statistics | Voluntary unsm- ployment insurance statistics | | loyers' urns | Employers' |
| Date | Number employed | Employ percentage numbe | rof: | Number employed | Index (1929) | Num- ber em- | Index (1929) | Index (1926) |
| | | Workers | Hours of work | | | ployed | | |
| 1927 | * | * | • | 1,376,049 | 100.0 | • | * | 88.1 |
| 1928 | 17,436,100 | 74.5 | 70.5 | 1,446,027 | 100.2 | * | | 94.2 |
| 1929 | 17,595,347 | 70.4 | 67.4 | 1,448,845 | 10 0 .0 | 68,032 | 100.0 | 100.0 |
| 1930 | 16,408,528 | 61.2 | 56.2 | 1,378,330 | 96.6 | 67,823 | 99.7 | 94.5 |
| 1931 | 14,336,418 | 50.7 | 44.5 | 1,255,353 | 87.4 | 66,485 | 97.7 | 85.3 |
| 1932 | 12,517,882 | 41.9 | 35.7 | 1,107,256 | 78.2 | 68,525 | 100.7 | 72.5 |
| 1933 | 13,015,614 | 46.3 | 41.0 | 1,022,942 | 81.1 | 57,960 | 85.2 | 70.6 |
| 1934 | 15,040,864 | 58.5 | 53.7 | 1,010,993 |] 78.3 | 60,111 | 88.4 | 80.9 |
| 1935 | 15,949,332 | 63.9 | 58.6 | 967,3304 | 80.0 | 61,919 | 91.0 | 83.8 |
| 1935 July | 16,640,207 | 65.9 | 59.1 | 981.056 | 84.1 | 71.322 | 104.8 | 84.8 |
| Aug. | 16,689,880 | 66.2 | 59.6 | 990,971 | 82.0 | 75,356 | 110.8 | 86.2 |
| Sept. | 16,634,277 | 66.3 | 61.3 | 1.001,091 | 84.5 | 74,594 | 109.6 | 89.0 |
| Oct. | 16,507,509 | 66.1 | 61.3 | 989,332 | 82.9 | 70,396 | 103.5 | 90.4 |
| Nov. | 16,496,708 | 65.6 | 61.7 | 961.571 | 82.8 | 65,733 | 96.6 | 87.8 |
| Dec. | 15,581,790 | 63.8 | 59.7 | 895,165 | 82.2 | 53,742 | 79.0 | 83.1 |
| 1936 Jan. | 15,672,053 | 62.8 | 57.4 | 871,158 | 79.6 | 56,659 | 83.3 | 82.6 |
| Feb. | 15,674,824 | 63.3 | 58.2 | 871,497 | 78.9 | 57,210 | 84.1 | 83.0 |
| March | | 65.4 | 61.1 | 907,915 | 83.0 | 62,289 | 91.6 | 81.7 |
| April | 17,038,756 | 67.4 | 63.8 | 936,265 | 84.6 | 67,707 | 99.5 | 83.5 |
| Мау | 17,520,183 | 69.3 r | 66.1 * | 958,700 | 85.0 | 75,658 | 111.2 | 85.6 |
| June | 17,675,483 | 70.3† | 65.8† | 963,059 | 86.6 | 80,126 | 117.8 | 87.8 |
| July | 17,839,000† | - | - | | ll — | 84,234 | 123.8 | 1 - |
| Persons covered | • | • | | • | 913,862 | | <u> </u> | 987,955† |

| | Denm. | ARK | ESTONIA • | | | U | NITED ST | TATES | |
|--------------------|--------------------------|---------|-----------------------|-----------------|---------------|-----------------|---------------|-----------------------|-------------------------|
| _ | Employers | returns | Employers' returns | | | Emp (Manufa | loyers' r | eturns ndustries)* | |
| Date | Total nur hours worke | | | 1 | Index (1 | 923-1925 |) | Estima | ates of: |
| | Number | Index | Index (1 Jan.1927) | Emp | loyed | 77 | D | Wage | Weekly |
| | (thousands) | (1931) | (1 584.1527) | Unad- justed | Ad- justed | Hours worked | Pay- rolls | earners employed | payrolls (\$1,000's) |
| 1927 | • | * | 93.0 | 94.4 | * | 95.0 | 93.3 | 8,288,400 | 206,980 |
| 1928 | | * | 98.2 | 94.4 | • | 95.6 | 93.9 | 8,285,800 | 208,334 |
| 1929 | * | * | 100.0 | 100.0 | * | 100.0 | 100.0 | 8,785,600 | 221,937 |
| 1930 | * | * | 95.8 | 87.3 | * | 80.8 | 81.3 | 7,668,400 | 180,507 |
| 1931 | 962 | 100.0 | 88.1 | 73.9 | * | 63.0 | 61.9 | 6,484,300 | 137,256 |
| 1932 | 881 | 91.6 | 82.7 | 61.2 | | 45.0 | 42.3 | 5,374,200 | 93,757 |
| 1933 | 985 | 102.4 | 84.3 | 65.8 | * | 50.5 | 44.5 | 5,778,400 | 98,623 |
| 1934 | 1,092 | 113.5 | 97.5 | 75.2 | | 55.2 | 56.7 | 6,605,700 | 125,997 |
| 1935 | 1,141 | 118.6 | 109.7 | 78.4 | | 60.8 | 64.4 | 6,890,900 | 142,990 |
| 1935 July | 1.184 | 123.1 | 110.5 | 76.0 | 76.7 | 56.5 | 59.4 * | 6,682,400 | 133,019 |
| Aug. | 1,180 | 122,7 | 111.6 | 78.2 | 78.0 | 60.4 | 63.9 | 6,871,600 | 141,879 |
| Sept. | 1,201 | 124.8 | 111.3 | 79.9 | 78.1 | 63.0 | 66.2 | 7,014,500 | 146,876 |
| Oct. | 1,208 | 125.6 | 112.3 | 81.4 | 79.8 | 66.8 | 68.7 | 7,146,300 | 152,629 |
| Nov. | 1,186 | 123.3 | 114.4 | 81.1 | 80.9 | 64.6 | 68.3 | 7,124,000 | 151,626 |
| Dec. | 1,177 | 122.3 | 111.1 | 80.7 | 81.7 | 65.9 | 70.0 | 7,093,400 | 155,909 |
| 1936 Jan. | 1,098 | 114.1 | 114.4 | 79.1 | 81.0 | 62.3 | 66.6 | 6,955,800 | 146,917 |
| Feb. | 1,0567 | 109.87 | 118.4 | 79.8 r | 80.1 | 63.0 * | 66.6 | 6,975,900 r | 147,043 |
| March | 528 7 | 54.97 | 123.4 | 80.2 | 80.3 | 65.3 | 69.9 | 7,050,800 | 155,321 * |
| April | 1,162 | 120.8 | 126.5 | 81.2 | 81.0 | 66.3 | 71.4 | 7,130,600 | 144,137† |
| May | 1,272 | 132.2 | 132.8 | 81.8 | 81.9 | 67.6 | 72.7 | _ | _ |
| June | 1,276 | 132.6 | | 82.1 | 82.3 | 67.9† | 72.1 | 1 - | _ |
| July | 1,276 | 132.6 | _ | 82.8† | 83.7† | - | 71.3† | | _ |
| Persons covered | • | • | 51,914 | | 4,238 | ,731† | · | * | • |

The figures in brackets after the word "Index" denote the original base period of the series. When they are in heavy type this base has been retained (= 100); in all other cases the series have been recalculated on the base 1929 = 100.

Including the Saar Territory.

Figure for July.

Since May 1935, excluding voluntarily insured.

Workers covered by the statistics, including unemployed.

The figures relate to the 1st of the following month.

Figure affected by industrial dispute.

Since January 1931, excluding "building".

STATISTICS

STATISTICS OF EMPLOYMENT 1 (cont.)

| | UNITED STATE | \$ (cont.) | FINL | AND 2 | FRA | NCE | GREAT B | RITAIN |
|--------------------|-------------------------------|------------|--------------------|-----------------|----------------------|--|-----------------------------------|--------|
| Date | Estimates (I Federation of | | Employer | s' returns | Returns inspe | of labour ctors | Unemployment insurance statistics | |
| Date | Number employed | Index | Index | (1926) | | Index (same month of 1830 = 100) Ratimated pumber Ind | | |
| | (1,000's) | (1929) | Number employed | Hours worked | Number employed * | Hours worked | employed | (1924) |
| 1927 | * | * | 104.2 | * | * | * | 10,018,000 | 98.0 |
| 1928 | * | * | 107.3 | * | * | * | 10,023,000 | 98.0 |
| 1929 | 46,192 | 100.0 | 100.0 | 100.0 | * | * | 10,223,000 | 0.001 |
| 1930 | 43,982 | 95.2 | 88.5 | 83.5 | 100.0 | 100.0 | 9,809,000 | 96.0 |
| 1931 | 40,679 | 88.1 | 80.2 | 74.2 | 92.5 | 88.6 | 9,437,000 | 92.3 |
| 1932 | 36,878 | 79.8 | 81.3 | 75.3 | 80.9 | 73.6 | 9,367,000 | 91.7 |
| 1933 | 36,959 | 80.0 | 88.5 | 82.5 | 79.4 | 74.3 | 9,684,000 | 94.8 |
| 1934 | 38,924 | 84.3 | 100.0 | 94.8 | 76.9 | 71.4 | 10,142,000 | 99.3 |
| 1935 | 39,685 | 85.9 | 105.8 | 101.8 | 73.5 | 68.1 | 10,380,000 | 101.6 |
| 1935 July | 39,433 | 85.4 | * | * | 75.0 | 69.6 | 10,418,000 | 102.0 |
| Aug. | 39,740 | 86.0 | | * | 74.1 | 68.8 | 10,472,000 | 102.4 |
| Sept. | 40,218 | 87.1 | 106.3 | 101.0 | 74.6 | 69.7 | 10,481,000 | 102.5 |
| Oct. | 40,607 | 87.9 | * | * | 74.6 | 69.7 | 10,537,000 | 103.1 |
| Nov. | 40,622 | 87.9 | * | * | 74.3 | 69.8 | 10,548,000 | 103.2 |
| Dec. | 40,758 | 88.2 | 102.1 | 99.0 | 73.8 | 69.9 | 10,604,000 | 103.7 |
| 1936 Jan. | 39,558 | 85.6 | * | • | 72.6 | 69.9 | 10,352,000 | 101.3 |
| Feb. | 39,683 | 85.9 | * | * | 72.6 | 68.4 | 10,485,000 | 102.6 |
| March | 40,119 | 86.9 | 103.1 | 99.0 | 72.5 | 68.1 | 10,634,000 | 104.0 |
| April | 40,848 | 88.4 | * | * | 72.9 | 68.5 | 10,718,000 | 104.9 |
| May | 41,143† | 89.1† | | * | 73.2 | 69.5 | 10,838,000 | 106.1 |
| June | 1 – | 1 — 🗀 | 111.5 | 106.2 | 73.8 | 69.5 | 10,837,000 | 106.1 |
| July | - | - | * | * | 75.8 | 71.6 | 10,897,000 | 106.6 |
| Persons covered | • | * | * | * | 2,232 | 2,648 | * | * |

| Date | Hungary Social insurance statistics | | ITALY Employers' returns | | | Japan | LATVIA Sickness insurance statistics | |
|--------------------|--------------------------------------|-----------------|--------------------------|--------------------|---------------------------|-----------------------|--------------------------------------|-----------------|
| | | | | | | Employers' returns | | |
| | - | | | Index * (1929) | | | | |
| | Number employed | Index (1927) | Index 4 (1934) | Number employed | Number of hours worked | Index (1926) | Number employed | Index (1930) |
| 1927 | 1,033,609 | 98.3 | | * | • | 104.1 | 148,288 4 | 87.4 4 |
| 1928 | 1,064,599 | 101.3 | * | * | | 99.2 | 161,483 | 94.7 |
| 1929 | 1,051,169 | 100.0 | * | 100.0 | 100.0 | 0.001 | 171,195 | 100.0 |
| 1930 | 990,776 | 94.3 | * | 97.3 | 94.2 | 90.0 | 179,636 | 105.3 |
| 1931 | 937,298 | 89.2 | * | 88.8 | 83.5 | 81.7 | 166,939 | 97.9 |
| 1932 | 862,469 | 82.0 | * | 78.5 | 72.4 | 82.0 | 141,296 | 83.2 |
| 1933 | 853,203 | 81.1 | . * <u>.</u> | 79.4 | 75.1 | 89.9 | 150,236 | 88.4 |
| 1934 | 913,068 | 86.8 | 100.0 | 82.9 | 77.8 | 100.2 | 162,837 | 95.8 |
| 1935 | 958,234 | 91.2 | * | * | · • | 109.7 ^z | 172,615 | 101.1 |
| 1935 July | 957,418 | 91.1 | 115.1 | 98.3 | 88.7 | 110.8 | 175,879 | 103.2 |
| Aug. | 981,136 | 93.3 | 117.6 | 100.1 | 85.4 | 110.4 | 174,428 | 102.1 |
| Sept. | 1,002,705 | 95.4 | * | * | * | 110.9 | 175,591 | 103.2 |
| Oct. | 1,015,721 | 96.7 | * | * | * | 110.8 | 180,429 | 105.7 |
| Nov. | 1,008,261 | 95.9 | * | * | * | 111.0 | 181,180 | 106.3 |
| Dec. | 933,766 | 88.8 | . * | * | * | 111.0 | 174,099 | 102.1 |
| 1936 Jan. | 956,422 | 91.0 | ∦ · ★ | * | 1 * | 110.6 | 172,875 | 101.1 |
| Feb. | 973,837 | 92.6 | * | * | | 111.3 | 173,038 | 101.1 |
| March | 1,018,379 | 96.9 | * | | ! ! | 112.5 | 176,259 | 103.2 |
| April | 1,022,676 | 97.2 | * | | ! | 116.0 | 177,232 | 104.2 |
| May | _ | - | | i I | [| 116.6 | 182,783 | 107.4 |
| June | - | | | : | | | 185,608 | 108.4 |
| July | | _ | • | | - | | _ | |
| Persons covered | * | • | 946,517 | 1,208,621 | | 1,096,529 | * | |

¹ The figures in brackets after the word "Index" denote the original base period of the series. When they are in heavy type this base has been retained (= 100); in all other cases the series have been recalculated on the base 1929 = 100. ¹ The figures relate to the beginning of the following month. ¹ The figures relate to the first of the month. ¹ Ministry of Corporations. ¹ Fascist General Industrial Confederation. ¹ Yearly averages for 1927-1930, based on average number insured each month.

STATISTICS OF EMPLOYMENT 1 (cont.)

| Date | Luxemburg* Employers' returns | | NETHERLANDS . | Pol | Sweden Employers' | |
|--------------------|--------------------------------|--------|---|---|---|----------------------|
| | | | Unemployment insurance statistics | Employer | | |
| | Number | Index | _ | lno | Social Board | |
| | employed | (1929) | Index (1929) | Number employed (1928) (all industries) | Hours worked per week (1929) (manufactures) | Index (1926-1980) |
| 1927 | 41,129 | 93.6 | 98.3 | 89.5 | 90.0 | |
| 1928 | 42,927 | 97.7 | 100.3 | 99.7 | 103.0 | * |
| 1929 | 43,944 | 100.0 | 100.0 | 100.0 | 100.0 | • |
| 1930 | 43,122 | 98.1 | 98.0 | 86.8 | 81.1 | * |
| 1931 | 36,942 | 84.1 | 90.5 | 73.9 | 66.3 | |
| 1932 | 29,696 | 67.6 | 79.4 | 63.3 | 53.2 | • |
| 1933 | 28,483 | 64.8 | 77.7 | 62.9 | 54.6 | 89.1 |
| 1934 | 28,803 | 65.6 | 76.5 | 68.0 | 63.6 | 97.4 |
| 1935 | 29,334 | 66.7 | 72.5 | 71.4 | 69.1 | 103.1 |
| 1935 July | 29,596 | 67.3 | 75.0 | 72.6 | 67.0 | |
| Aug. | 29,549 | 67.2 | 74.6 | 74.1 | 72.0 | * |
| Sept. | 29,750 | 67.7 | 73.6 | 75.3 | 75.5 | 104.6 |
| Oct. | 29,770 | 67.7 | 73.6 | . 80.0 | 77.7 | |
| Nov. | 29,927 | 68.1 | 71.8 | 76.9 | 81.0 | • |
| Dec. | 29,778 | 67.8 | 67.6 | 69.4 | 72.2 | 104.4 |
| 1936 Jan. | 29,396 | 66.9 | 66.1 | 67,4 | 61.6 | • |
| Feb. | 29,540 | 67.1 | 67.4 | 68.7 | 64.3 | |
| March | 29,557 | 67.3 | 70.2 | 71.4 | 64.3 | 104.5 |
| April | 29,882 | 68.0 | 71.7 | 73.7 | 72.9 | |
| May | 30,283 | 68.9 | 72.6 | 76.0 | 74.6 | • |
| June | 30,379 | 69.1 | <u> </u> | 76.5 | 74.5 | 109.2 |
| July | 30,576 | 69.6 | - | - | _ | • |
| Persons covered | , | * | 466,759 4 | 645,239 † | 17,359 4 | 248,671 |

| Date | SWITZERLAND | CZECHOSLOVAKIA 6 | | UKION OF SOUTH AFRICA | | YUGOSLAVIA | |
|--------------------|--------------------|---------------------------|-----------------|---------------------------------------|---------|--------------------------------|----------|
| | Employers' returns | Social insur statistic | | Employers' returns Index (July 1925) | | Social insurance statistics | |
| | Index (1925) | Number employed | Index (1928) | | | Number | Index |
| | | | | Euro- peans | Total 7 | employed | (1928) |
| 1927 | 91.2 | * | | 94.2 | 95.9 | 511,493 | 84.5 |
| 1928 | 97.3 | 2,488,252 | 99.3 | 97.2 | 98.2 | 565,796 | 93.5 |
| 1929 | 100.0 | 2,505,537 | 100.0 | 100.0 | 100.0 | 605,065 | 100.0 |
| 1930 | 96.5 | 2,444,690 | 97.5 | 97.4 | 98.1 | 631,181 | 104.3 |
| 1931 | 88.5 | 2,314,990 | 92.4 | 93.5 | 93.8 | 609,190 | 100.7 |
| 1932 | 76.1 | 2,085,2 44 | 83.2 | 87.6 | 87.2 | 535,617 | 88.5 |
| 1933 | 73.0 | 1,887,650 | 75.4 | 90.3 | 91.2 | 520,980 | 86.1 |
| 1934 | 73.3 | 1,879,372 | 75.0 | 100.3 | 102.3 | 543,559 | 89.8 |
| 1935 | 70.2 | 1,917,030 | 76.5 | 109.7 | 114.1 | 564,287 | 93.3 |
| 1935 July | | 2.082.051 | 83.1 | 110.0 | 114.6 | 576,573 | 95.3 |
| Aug. | | 2,065,547 | 82.4 | 110.6 | 115.2 | 586,688 | 97.0 |
| Sept. | 70.5 | 2,056,261 | 82.1 | 111.6 | 116.5 | 594,340 | 98.2 |
| Oct. | | 2,069,013 | 82.6 | 111.8 | 117.0 | 601,622 | 99.4 |
| Nov. | • | 2,049,338 | 81.8 | 112.5 | 117.6 | 599,655 | 99.1 |
| Dec. | 68.7 | 1,874,683 | 74.9 | 113.2 | 118.7 | 571,418 | 94.4 |
| 1936 Jan. | | 1,733,500 | 69.2 | 113.2 | 119.4 | 548,309 | 90.6 |
| Feb. | • | 1,766,414 | 70.5 | 115.1 | 122.5 | 552,948 | 91.4 |
| March | 68.8 | 1,846,820 | 73.7 | 115.9 | 123.6 | 574,326 | 94.9 |
| April | 1 * 1 | 1,994,359 | 80.2 | 116.6 | 124.2 | 598,363 | 99.0 |
| Мау | 1 <u>*</u> | 2,118,652 | 84.6 | 117.3 | 124.9 | 625,871 | 103.5 |
| June | 69.7 | 2,177,392 | 86.9 | 11 — | - | – | I — |
| July | " | 2,208,000† | 88.1 | - | - | | - |
| Persons covered | 200,765 | • | • | <u>"</u> | • | • | <u> </u> |

¹ The figures in brackets after the word "Index" denote the original base period of the series. When they are in heavy type this base has been retained (= 100); in all other cases the series have been recalculated on the base 1929 = 100. ¹ The figures relate to the 1st of the month. ⁰ Excluding agriculture. ⁰ Workers covered by the statistics, including unemployed. ⁰ Hours worked (thousands). ⁰ Average for the month. ¹ Including "Natives".

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Statistics of Total Wages and Salaries

Introduction

The following table has been compiled as a first attempt to summarise the available statistics in the different countries relating to the aggregate amounts paid in wages and salaries to the employed population, or to a large section of the employed. Such estimates, which are also described as "total bill", "labour income", "income from work", are of interest from several points of view, e.g. they throw light on the importance of wages 1 as an element in the cost of production, on wages as part of the national income, and on the amount of purchasing power which is at the disposal of the employed population. It is to the last of these aspects that attention has been directed in this article.

It should be emphasised at the outset that the following statistics are quite distinct from those published at quarterly intervals in this Review 2 under the title "Statistics of the General Level of Wages". These quarterly statistics generally give information on wages per worker, usually in the form either of the rates paid, or of average actual earnings. These data are compiled for short intervals of time, the hour, the day, the week, etc., and give no indication of the actual amounts received during a whole year. The remuneration of a worker depends not only on his rates of pay, but on the total time during which he has been receiving them, and interruptions due to periods of unemployment, sickness, accident, or holidays, which diminish his annual earnings, are not taken into consideration in these statistics.

Statistics of total wages paid, on the other hand, treat wages from a different standpoint. They purport to measure the total amount of income derived from work during a period (usually a year) by all the workers in the country who have worked during the year, or by all the workers in a certain defined group of industries of the country.

Statistics of this kind are available from a variety of sources. In a few cases data are compiled from the payrolls of certain establishments with the sole object of measuring changes in the total wages bill; in others, similar data are compiled as part of a wider enquiry into production; in others, again, figures on total wages insured are available as the result of the application of certain social insurance legislation; finally, in a few cases, estimates are made on various bases, usually as a part of estimates of the national income of one country.

The most numerous series used in the following table are those based on censuses of production (also called censuses of manufactures) (13 countries) and those based on social insurance legislation (9 countries). Data compiled directly from the payrolls of establishments and

¹ In the text, the word "wages" must be understood to mean "wages and salaries, etc.", unless otherwise stated, or implied by the use of the fuller term.

² Cf. International Labour Review, Vol. XXXIV, No. 1, July 1936, pp. 115-127.

estimates based on a variety of sources have been found, in the form required for these tables, for only a few countries (2 and 4 respectively). In all, it has been possible to cover 20 countries (some of them represented by more than one kind of statistics). It will probably be possible to increase this number in the future.

Many countries compile data on total wages for a particular industry—e.g. for all the chief coal-producing countries, data are available showing total wages paid in the coal mines of the country—but these are not included in the present survey. Similarly, various enquiries or estimates of very large scope but giving data for only one date have been excluded from the table.

One important consideration must, however, of the workers, be noted. In no case do the figures represent the total purchasing power of the workers, but only that part of it represented by wages and salaries paid during periods of employment. In most countries, persons out of employment receive payments in the form of unemployment benefit, or assistance; various other forms of social insurance, such as sickness insurance, accident compensation, old-age pensions, etc., also provide benefits in periods of non-employment; though these are in some cases a transfer of purchasing power from some employed classes to others, they are also often a net addition to purchasing power. This must be borne in mind especially when the figures are used as a measure of changes in total purchasing power, as none of the series mentioned take account of this supplementary income, except, perhaps, some of the series based on estimates of the national income.

ARRANGEMENT OF THE TABLE

In the table, annual figures are given where possible for the years 1927 to 1935. The upper part of the table gives the original figures in absolute amounts in the national currency, sometimes regrouped in accordance with the scheme of the table; in the second part these data are expressed in the form of index numbers on the base 1929=100; in the third part, these index numbers are corrected for changes in prices, thus giving a rough measure of changes in the "real value" of total wages and salaries; in the fourth part, the number of "persons" or of "full-time workers" covered by the statistics is indicated. Notes on the sources used and the methods of compilation of the various series are given at the end of the article. The signs used in the table are explained on page 382 above. The countries are arranged in the alphabetical order of their French names.

NATURE OF THE DATA

(1) Statistics of Production.

These statistics 1 give data on the amount or the value of production ("net output", "value added"), as well as of the various items in the

¹ Australia, Canada, Estonia, United States of America, Finland, Hungary, Irish Free State, Latvia, Norway, New Zealand, Poland, Rumania, Union of South Africa.

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cost of production. The figures for total wages paid, although compiled chiefly in order to measure one of the elements in the cost of production, can also be used to show the total annual remuneration of the persons employed. These censuses do not usually cover all existing establishments, but are limited first to certain branches of economic activity, and secondly to establishments of a certain importance, defined according to various criteria such as the number of persons employed, the horse-power used, or the value of their output. The proportion of establishments and persons covered is usually very high; it may, however, vary a little from year to year, since the criteria adopted may exclude more or fewer establishments in one year than in another, owing to the state of general business activity and that of particular establishments. The fluctuations in the total wages shown are thus probably more accentuated than if all existing establishments were included each year, but the effect of this is not likely to be very great.

(2) Social Insurance Statistics.

In many countries ¹ the application of social insurance legislation yields certain data which make it possible to arrive at estimates of the total wages paid. In many accident insurance schemes, where the employers' contributions are fixed as specified proportions of the wages paid, the total wages paid can be calculated from the total amount of contributions received. In other cases—mostly in sickness insurance schemes—the contributions are fixed at certain rates, or at certain absolute amounts, for specified wage groups; thus the total wages paid may be theoretically reconstructed from the number of workers (or of days of work) for which contributions are paid in each of these wage groups, on the assumption that the wages paid in each group fall on the average at the middle of the range for that group.

As the scope of social insurance schemes is usually very comprehensive, the figures thus obtained are very representative, but, as in the case of censuses of production, various categories of establishments or workers are sometimes excluded from the scope of insurance and the reservations made above apply also here to a certain extent. Moreover, in the case of accidents, insurance is sometimes optional; "self-insurers" are then excluded from the statistics and the absolute amounts given do not correspond to the total wages of a well-defined economic group. Further, the categories not covered may vary in importance from year to year owing to the state of business activity and for other reasons, so that the results are not always satisfactory as showing changes in the volume of wages. In fact, it has been considered desirable to exclude certain series owing to their not being sufficiently comparable from year to year.

Similarly, certain series have not been included in the tables where the scope of the legislation has been substantially modified in the years covered, and where it appears that the legislation is in fact not

¹ Germany, Austria, Finland, France, Hungary, Netherlands, Poland, Switzerland, Czechoslovakia.

fully or not regularly applied either to certain establishments or to certain categories of workers.

Finally, most insurance schemes fix an upper limit of wages above which the amount of wages is not taken into account in computing contributions; it is necessary that this limit should not be substantially varied in the period considered, and that it should not be so low that a large proportion of the wages paid remains outside it. Even with an unchanged wage limit, the proportion excluded may vary from year to year according to the rise and fall of wage rates. It is not possible to estimate the effect on total wages of this latter eventuality, but it seems probable that the fluctuations in total wages thus recorded will be less marked than if data were available for the whole wage of all the workers.

(3) Statistics of Payrolls.

These statistics ¹ are based on returns furnished by a certain number of selected establishments of the numbers employed on a certain date and the total hours worked and total wages paid during a certain period, usually a week. The main drawback of these statistics is that they relate only to certain establishments; it is therefore often difficult to estimate what proportion they represent of all establishments in the branches covered, and in addition the number of returns received varies slightly from month to month. Moreover, it has been found that such series have in long periods a certain "bias", owing to the fact, among others, that new establishments are not sufficiently taken into account to replace establishments which have closed down.

These statistics, therefore, are primarily of use in following short-period fluctuations, after correction for the month-to-month variations in the number of establishments covered. Data of this kind are collected in several countries, i.e. the countries which publish statistics of earnings. For long-period fluctuations, there are only 2 countries in which the data are published in an appropriate form, either because the representative series is adjusted from time to time to another more complete series, or because the statistics in fact cover a well-defined economic aggregate.²

(4) Estimates.

Under this heading are given the series published in 4 countries ³ which do not fall under any of the above headings. For many countries estimates are made as to the national income and its distribution, compiled either officially or, more usually, privately, and figures are often given of the amount of the national income which goes to

¹ United States of America, Poland.

² In the United States the monthly payroll statistics are adjusted according to the results of the biennial censuses of manufactures. In Poland the statistics cover all industrial establishments employing 20 workers or more, as well as all mining and metallurgical establishments.

³ Germany, United States of America, France, Great Britain.

labour, as distinct from rent, interest, etc. Among these various estimates only those compiled at regular intervals and concerning labour income have been included in the table. In view of the great differences in methods of compilation, in the sources used, and in the degree of precision, it is not possible to summarise the methods adopted for these series; for further details the reader is referred to the notes on sources and methods.

Branches and Categories of Persons Covered

As already indicated, the scope of the different series as regards the branches of economic activity covered varies considerably. The series based on statistics of production, censuses of manufactures, etc., are naturally limited, as these terms imply, to establishments engaged in productive work or manufacture; home-work industries are usually excluded. The situation is the same for payroll series. In some social insurance statistics, certain series cover agriculture, or certain branches of agriculture, but in a few cases the data for agriculture have been excluded, as they are subject to important reservations. The series based on estimates of national income have usually the largest scope and include most branches of economic activity.

The headings of the table give in summary form the scope of the different series, using for this purpose the terminology adopted by the International Labour Office for the presentation of data by industry or occupation ¹, but it should be understood that the mention of a certain branch does not necessarily mean that the whole of this branch is covered. The group "industry" (which means industry in the sense of manufacturing and construction) is, however, usually fairly well represented (though "building" is often excluded in the statistics of production); the groups "commerce" and "transport", when mentioned, are usually less completely covered.

As regards the categories of employed persons covered, the terms "wage earners", "salaried employees", and "officials" have been used, and where data for "wage earners" are published separately, these have always been reproduced. It should be understood, however, that these terms have not exactly the same meaning in different countries; in particular, the scope of the term "salaried employees" differs, managers, directors, and even working proprietors, etc., being sometimes included, sometimes not. ²

INDEX NUMBERS OF THE NOMINAL VALUE OF TOTAL WAGES AND SALARIES

In order to measure the *fluctuations* in total wages, all the original series have been converted by the International Labour Office into

¹ Cf. International Labour Review, Vol. XXXIV, No. 1, July 1936, p. 114.

² On this question, cf. also *International Labour Review*, Vol. XXXIV, No. 2, Aug. 1936, pp. 244-274: "Statistical Survey of Non-Manual Workers".

index numbers with 1929 (= 100) as base.¹ Some of the reservations as to the scope of the original series disappear, or at least are considerably reduced in importance, when the series are expressed in the form of index numbers, though many of the general reservations remain. It should also be remembered, as pointed out above, that these index numbers probably have a slight tendency to exaggerate the fluctuations for series based on statistics of production, and probably a contrary tendency for those based on social insurance statistics. Nevertheless, the series of index numbers in this part of the table give, it is thought, an approximate indication of the relative changes in total wages.

INDEX NUMBERS OF THE REAL VALUE OF TOTAL WAGES AND SALARIES

In view of the magnitude of the changes in the level of prices during the period considered, the figures of total wages and the index numbers based on them do not accurately reflect the changes in the purchasing power of the workers. To obtain a rough measure of such changes, it is necessary to use the available cost-of-living index numbers (given in this $Review^2$, also on the base 1929=100). For this purpose the figures in the third part of the table have been calculated by the International Labour Office (by dividing the index numbers in the second part of the table by the corresponding cost-of-living index number and multiplying the result by 100).

These corrected index numbers are, however, subject to even greater reservations than the series uncorrected for price changes, since the available cost-of-living index numbers are not always suitable for measuring changes in the purchasing power of large masses of the occupied population. Apart from their numerous divergences of method, which are mentioned in other publications of the Office 3, most of these index numbers refer to working-class families or to certain towns only 4, while the total wages considered refer usually to almost the whole of the workers in certain branches, including in many cases salaried employees, officials, and even managers, and sometimes also workers in agriculture. In view, however, of the magnitude of the fluctuations in the level of prices in the last ten years, it is felt that this factor should not be ignored, and that an attempt should be made to indicate its effect on the purchasing power of total money wages. These index numbers are thus not intended to do more than give a very rough idea of the changes in the real value of total wages and salaries.

¹ In the absence of figures for 1929, the nearest year for which data are available has been taken as base, and the index numbers are given in italics.

² Idem, Vol. XXXIV, No. 1, July 1936, pp. 128-132.

³ Ibid., and also: Methods of Compiling Cost-of-Living Index Numbers; Studies and Reports, Series N, No. 6; Geneva, 1925.

⁴ When the cost-of-living index numbers refer to one town only (usually the capital) the index numbers of real value are given in brackets.

Number of Persons or "Full-Time Workers" Covered by the Statistics

This part of the table indicates in a general way the scope of the series as regards the number of employed persons covered. The method of arriving at this figure varies from case to case. In the case of series based on statistics of production, the figures are usually averages of the numbers on the payrolls on certain days of the year, though sometimes they relate to only one date in the year (especially for "salaried employees", whose number is more stable than that of "wage earners"). In some cases, again, approximate estimates are used. In the case of series based on social insurance statistics, the figures given are as a rule expressed in terms of theoretical "full-time workers". These data are usually obtained by dividing the total number of days or hours worked in the establishments (as declared by the employers for fixing their contributions) during a certain period, usually a year, by a conventional figure, e.g. 300 for days worked or 2,400 for hours worked during the year. In a few cases the insurance statistics give the number of persons insured, i.e. the number on the registers of the insurance institutions at a given date, or an average of such figures at different dates. For the other two classes of statistics, payrolls and estimates based on the national income, no figures are available in the form required for the present table, but some indications are given on this point in the notes on method.

These figures of the number of persons employed or insured or of "full-time" workers are not strictly comparable. Besides the general indication they give as to the scope of the statistics, they may, however, also be taken to give a rough indication of the extent to which fluctuations in total wages are due to changes in the total number of workers, and hence to changes in the wages themselves.

Further, it follows from what has been said above that the figures obtained by dividing the total wages paid by the total number of workers, while giving an average annual wage, would not be internationally comparable. Although figures of this kind are computed in different countries, they are not reproduced here, in view of the misinterpretations to which they are liable. It is hoped, however, after further investigation, to compile certain data on this aspect of the question at some future date.

* *

It is intended to publish data of this nature at annual intervals and to extend and improve the tables in future issues. In spite of the large number of reservations necessary and the limited scope and approximate character of many of the series, it is thought that this first attempt to bring together the available data on the subject will be of value, in view of the great interest which is taken in this question.

| | <u> </u> | GERMANY | | AUSTRALIA | | AUSTRIA |
|--|---|--|---|--|---|--|
| | Social insurance statistics | Estimate | Statis | tics of prod | luction | Social insurance statistics |
| Year 1 | Mines, ind., transp., comm., etc. | Agr., mines, ind., transp., publ. adm., comm., etc. | | Industries | Mines, ind., trans- port, commerce, etc. | |
| | Wage earners, salaried employees | Wage earners, salaried employees, officials | Wage earners | | | Wage earners, salaried employees |
| | To | tal wages and salaries (paid | d, insured, | or estimat | ed) | |
| | | Amount (to | nearest m | illion) | | |
| | RM. | RM. | £ | £ | £ | Sch. |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 19,410 21,827 22,989 21,602 16,739 12,145 12,631 15,720 17,892† | 43,045 39,851 33,378 25,711 25,960 29,262† 31,901† | 78.52 78.74 78.04 71.95 51.72 46.07 49.34 53.89 61.43 | 12.06 12.62 12.95 12.77 10.73 9.86 10.08 10.56 11.40 | 90.58 91.36 90.99 84.72 62.45 55.93 59.42 64.45 72.83 | 1,470 1,613 1,699 1,616 1,434 1,155 1,010 1,003 |
| | | Index numbers of nomin | al value (B | ase : 1929 = | 100) | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 84 95 100 94 73 53 55 68 78† | * 100 93 78 60 60 68† 74† | 101 101 100 92 66 59 63 69 79 | 93 97 100 99 83 76 78 81 88 | 100 100 100 93 69 61 65 71 80 | 87 95 100 95 84 68 59 59 |
| | | Index numbers of real | value (Ba | se: 1929 = | 100) | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 88 96 100 98 82 67 72 87 97† | * 100 96 88 76 79 87† | 103 103 100 97 78 73 81 87 97 | 96 100 100 104 98 94 99 103 109 | 102 103 100 98 81 76 83 89 | (91) (98) (100) (95) (88) (70) (63) (62) |
| | Total number of | persons or full-time workers | covered b | y the statis | tics (000's | omitted) |
| | Number insured | * | | Persons | | Full-time workers |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 11,647 11,918 11,962 11,054 9,451 8,218 8,881 10,800 11,857† | * * * * * * * * * | 396 391 391 362 287 286 317 349 388 | 56 59 60 57 52 51 54 57 62 | 452 450 451 419 339 337 371 406 450 | 713 735 739 692 613 515 460 474 |

² Calendar year, except for Australia: business year ending with 30 June of the year indicated.

STATISTICS

| | | Canada | | ESTONIA | | United States | | | | | | |
|--|--------------------------|-------------------|--|--|--|-------------------------|---|---|--|--|--|--|
| | Statistics of production | | | Statistics Stat. of prod. and payrolls | | Estimate | | | | | | |
| Year | Industries | | Industries | Industries | Mines, in | d., transp. | Agr., mines, ind., transp., publ. adm., comm., etc. | | | | | |
| | Wage earners | Salaried empl. | Wage earn- ers, salaried employees | Wage earners | Wage earners | Wage earners | Salaried empl. | Wage earners, salaried empl., officials | | | | |
| Total wages and salaries (paid, insured, or estimated) | | | | | | | | | | | | |
| | | | A | Amount (to no | earest million | ı) · | | | | | | |
| | 8 | 8 | 8 | E.Kr. | 8 | 8 | 8 | \$ | | | | |
| 1927 | 531.6 | 162.3 | 693.9 | 20 | 10,836.0 | * | * | * | | | | |
| 1928 | 580.4 | 174.8 | 755.2 | 23 | 10,833.4 1 | * | * | * | | | | |
| 1929 1930 | 624.3 551.9 | 188.7 184.2 | 813.0 736.1 | 25 24 | 11,607.3 9,386.4 ¹ | 17,197 | 5,663 | 51,487 | | | | |
| 1931 | 437.7 | 186.8 | 624.5 | 21 | 7,173.2 | 14,251 10,608 | 5,548 4,606 | 47,198 39,758 | | | | |
| 1932 | 341.2 | 164.7 | 505.9 | 17 | 4,875.41 | 7,017 | 3,387 | 39,758 30,920 | | | | |
| 1933 | 313.7 | 151.9 | 465.6 | 17 | 5,261.6 | 7,189 | 3,048 | 29,420 | | | | |
| 1934 1935 | 372.6 | 161.0 | 533.6 — | 21 | 6,551.8 ¹ 7,435.5 ¹ | 8,944 10,1 49 | 3,250 3,417 | 33,528 36,057 | | | | |
| | | · | Index num | bers of nomina | ıl value (Base | e: 1929 = | 100) | <u>'</u> | | | | |
| 1927 | 85 | 86 | 85 | 83 | 93 | • | * | | | | | |
| 1928 | 93 | 93 | 93 | 95 | 94 1 | * | * | * | | | | |
| 1929 | 100 | 100 | 100 | 100 | 1 100 | 100 | 100 | 100 | | | | |
| 1930 | 88 | 98 | 91 | 98 | 81 1 | 83 | 98 | 92 | | | | |
| 1931 1932 | 70 55 | 99 87 | 77 62 | 84 70 | 62 42 1 | 62 41 | 81 60 | 77 60 | | | | |
| 1933 | 50 | 80 | 57 | 70 | 45 | 42 | 54 | 57 | | | | |
| 1934 | 60 | 85 | 66 | 84 | 57 1 | 52 | 57 | 65 | | | | |
| 1935 | | - | | _ | 64 1 | 59 | 60 | 70 | | | | |
| | | | Index | numbers of rea | l value (Base | : 1929 = 1 | 00) | | | | | |
| 1927 | 86 | 87 | 87 | (93) | 92 | * | • | : | | | | |
| 1928 1929 | 94 100 | 94 100 | 94 100 | (99) (100) | 94 ¹ 100 | 100 | 100 | 100 | | | | |
| 1930 | 89 | 98 | 91 | (111) | 84 1 | 86 | 102 | 95 | | | | |
| 1931 | 78 | 110 | 86 | (98) | 71 | 71 | 93 | 89 | | | | |
| 1932 | 67 | 107 | 76 | (87) | 54 ¹ | 52 | 76 | 76 | | | | |
| 1933 1934 | 6 <u>4</u> 76 | 103 108 | 73 83 | (94) | 72 1 | 55 66 | 71 73 | 75 82 | | | | |
| 1935 | - | - | - | (113) | 79 1 | 73 | 74 | 86 | | | | |
| | To | tal number | of persons of | full-time wor | cers covered | by the stat | istics (000's | omitted) | | | | |
| | | | Person | 5 | | * | * | * | | | | |
| 1927 | 533 | 86 | 619 | 28 | 8,334 | * | * | * | | | | |
| 1928 | 567 | 91 | 658 | 30 | | * | * | * | | | | |
| 1929 1930 | 598 551 | 96 93 | 694 644 | 31 30 | 8,822 | • | | * | | | | |
| 1931 | 457 | 100 | 557 | 27 | 6,507 | * | • | * | | | | |
| 1932 | 400 | 95 | 495 | 25 | • | * | • | * | | | | |
| 1933 | 399 | 95 | 494 | 25 | 6,056 | • | * | * | | | | |
| | 445 | 100 | 545 | 29 | 1 | • | | | | | | |
| 193 4 1935 | | | | _ | | * | * | * | | | | |

| | FINE | AND | Fra | INCE | GREAT BRIT | AIN AND NOR | THERN IRELAND |
|--|---|---|---|--|---|---------------------------------------|---|
| | Statistics of production | Social insurance statistics | Social insurance statistics | Private estimate | | Private estin | nate . |
| Year | Mines, industries | Industries | Agr., some mines, ind., some transp., comm., etc. | Agr.,mines, ind., transp., publ. adm., comm., etc. | Agr., mine | s, ind., trans comm., e | p., publ. adm., ic. |
| | Wage | earners | Wage earners, salaried employees | Wage earners, salaried empl., officials | Wage earners | Salaried employees, officials | Wage earners, salaried empl., officials |
| | | Total wa | ages and salaries | s (paid, insured, | or estimate | ed) | |
| | | | Amour | it (to nearest mil | llion) | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | F.Mk. 2,059 2,264 2,218 1,889 1,485 1,397 1,518 1,809 | F.Mk. 1,195 1,298 1,353 1,246 903 850 996 1,277 | Frs. 59,637 66,857 75,969 85,938 84,551 74,547 | Frs. 95,100 103,000 115,600 122,200 116,800 105,900 101,100 93,000 87,500† | £ 1,474 1,460 1,482 1,433 1,376 — — — | £ 821 835 838 827 808 | £ 2,295 2,395 2,320 2,260 2,184 2,143 |
| | | In | dex numbers of | nominal value (B | ase : 1929 = | 100) | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 93 102 100 85 67 63 68 82 | 88 96 100 92 67 63 74 94 | 79 88 100 113 111 98 — | 82 89 100 106 101 92 87 80 76 | 99 99 100 97 93 | 98 100 100 99 96 ————— | 99 99 100 97 94 92 — |
| | | ···· | Index numbers of | of real value (Base | e: 1929 = 1 | 00) 1 | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 94 101 100 92 79 75 84 102 | 90 95 100 100 79 75 90 118 | 100 102 96 | * * * * * * * * * * * * * * * * * * * | 97 97 100 100 103 — — | 96 98 100 102 107 — | 97 98 100 101 105 105 — |
| | Total numl | per of person | s or full-time w | orkers covered by | y the statist | ics (000's om | itted) |
| | Persons | Full-time workers | * | * | • | • | • |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 159 169 165 145 130 127 141 162 | 101 103 105 100 81 81 97 118 | * | * | | : | * |

¹ Except for series in italics: base: nearest possible year to 1929.

| | | I | Hungary | | I | RISH FREE | STATE |
|----------------|------------------------|------------------------|----------------------------------|--------------------------------|-----------------|-----------------------|-------------------------------|
| | Sta | tistics of pro | oduction | Social insurance statistics | Sta | tistics of pro | oduction |
| Year | | Industrie | es | Ind:, some transp., etc. | | Industrie | š |
| | Wage earners | Salaried employees | Wage earners, salaried empl., | Wage earners | Wage earners | Salaried employees | Wage earners salaried empl |
| | | Total w | ages and salaries | s (paid, insured, | or estimate | ed) . | |
| | | | Amou | nt (to nearest m | illion) | | |
| 1927 | Pengö 320 | Pengö 96 | Pengö 416 | Pengö 740 | £ | £ 1.51 1 | £ 5.49 ¹ |
| 1928 | 346 | 103 | . 449 | 760 | * | | * |
| 1929 1930 | 352 303 | 107 110 | 459 413 | 697 602 | 4.72 | 1.62 | 6.34 |
| 1931 | 253 | 99 | 352 | 508 | 4.20 | 1.63 | 5.83 |
| 1932 | 204 | 88 | 292 | 425 | 4.09 | 1 | : |
| 1933 1934 | 203 224 | 81 83 | 284 307 | 415 423 | 4.28 | 1 | |
| 1935 | | _ | _ | 450 | _ | • | * |
| | | In | dex numbers of | nominal value (B | ase: 1929 | = 100) | |
| 1927 1928 | 91 | 91 89 91 98 96 98 | | 106 109 | 84 | 93 | 87 |
| 1929 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1930 | 86 | 102 92 | 90 | 86 | * 89 | | 92 |
| 1931 1932 | 72 58 | 82 | 77 64 | 73 61 | 89 87 | 101 | 92 |
| 1933 | 58 | j 76 | 62 | 60 | 91 | i : | |
| 1934 1935 | 64 | 78 | 67 | 61 65 | _ | | * |
| | | · | Index numbers | of real value (Bas | e: 1929 = | 100) | 1 |
| 1927 | (96) | (95) | (96) . | (112) | 80 | 89 | 82 |
| 1928 1929 | (99) (1 00) | (96) (1 00) | (8e) (100) | (110) (100) | 100 | 100 | 100 |
| 1930 | (95) | (113) | (99) | (95) | * | * | * |
| 1931 1932 | (84) | (108) (98) | (89) (76) | (85) | 97 97 | 110 | 101 |
| 1933 | (75) | (98) | (80) | (73) (77) | 106 | * | * |
| 1934 1935 | (84) | (102) | (88) | (80) (83) | _ | * | |
| | } Total nu | mber of perso | ns or full-time we | orkers covered by | the statistic | s (000's omitt | ed) |
| | Persons | | | Full-time workers | | Persons | |
| 1007 | | - 00 | 054 | · | 221 | e 1 | 20.1.4 |
| $1927 \\ 1928$ | 226 234 | 29 30 | 271 ° 273 | 653 654 | 33 ¹ | 6 1 | 39 1, 3 |
| 1929 | 235 | 30 | 274 | 579 | 38 | 7 | 45 |
| 1930 1931 | · 210 190 | 30 28 | 247 218 | 518 455 | * 37 | 7 | 44 |
| 1932 | 171 | 27 | 203 | 405 | 39 | 7 | 46 |
| 1933 | 176 | 27 | 217 | 411 | 44 | 8 | 52 |
| 1934 1935 | 196 | 28 | 236 | 445 483 | | = | = |
| 1934 1935 | 196 | 28 | 236 — | 445 483 | _ | = | |

Figures of the 1926 census.
 The totals do not correspond to the sum of wage earners and salaried employees (see note on method, p. 407).
 Totals calculated by the International Labour Office (see note on method, p. 408).

| | LATVIA | | (Norw. | AY | New Zealand | NETHERLANDS | |
|--|--|---|--|---|---|--|--|
| Year 1 | Statistics of production Statistics of production Statistics of production | | Social insurance statistics | | | | |
| 1641 | Industries | | Indust | ries | Industries | Mines, ind., transp. comm., etc. | |
| | Wage earners, salaried empl. | Wage earners | Salaried employees | Wage earners, salaried empl. | Wage earners, salaried empl. | Wage earners, salaried empl. | |
| | Total | wages and | d salaries | (paid, insured, | or estimated) | | |
| | | | Amoun | t (to nearest mi | illion) | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 74 84 89 79 61 68 78 | Kr. 267 288 311 314 235 263 261 278 | Kr. 72 73 73 75 72 72 71 73 | Kr. 339 361 384 389 307 335 332 351 | £ 16.05 16.29 16.85 15.62 12.64 12.05 12.11 | FI. 1,553 1,654 1,753 1,805 1,693 1,451 1,391 1,364 | |
| ļ | | Index nu | mbers of n | ominal value (Ba | ase: 1929 = 100) | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 88 100 106 95 73 81 92 | 86 93 100 101 76 85 84 90 | 99 100 100 103 98 98 97 99 | 88 94 100 101 80 87 86 91 | 95 97 100 93 75 72 72 | 89 94 100 103 97 83 79 78 | |
| | | Index n | umbers of | real value (Base | : 1929 = 100) * | ····· | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | (100) (98) (87) (101) (121) | 77 89 100 104 82 94 95 100 | 88 95 100 106 106 109 109 111 | 79 100 105 87 97 98 102 | 96 97 100 95 83 86 91 | (89) (94) (100) (107) (107) (99) (96) (93) | |
| | Total number of pe | ersons or fu | ıll-time wor | kers covered by t | the statistics (000's o | mitted) | |
| | | | Persons | | | Full-time workers | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 61 67 72 72 66 62 70 85 | 94 107 115 116 92 106 107 113 | 13 14 14 14 14 14 14 15 | 107 a 121 129 130 106 120 121 121 | 79 81 83 78 69 69 73 | 1,264 1,339 1,392 1,422 1,336 1,188 1,183 1,205 | |

¹ Calendar year, except for New Zealand: business year ending with 31 March of the year following the year indicated. ¹ Except for series in italics: base: nearest possible year to 1929. ¹ Totals calculated by the International Labour Office (see note on method, p. 408).

| | | Poland | | | RUMANIA | · · · · · · · · · · · · · · · · · · · | | |
|--|----------------------------------|---|---|--|---|--|--|--|
| Year | Statistics of production | Statistics of payrolls | salaried employees earners employees salaries (paid, insured, or estimated) | oduction | | | | |
| rear | Industries | Mines, industries | Mines, ind., transp., comm., etc. | Industries | | | | |
| | Wage earners, salaried empl. | Wage earners | Wage earners, salaried employees | | | Wage earners, salaried empl. | | |
| | Т | otal wages and | salaries (paid, insure | d, or estima | ated) | | | |
| | | | Amount (to nearest | million) | | | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | | | * 2,275 • 2,855 • 3,228 • 2,995 • 2,567 • 2,005 | | 5,959 1,299 7,2 5,589 2,147 7,7 5,137 2,586 7,7 4,641 2,303 6,9 3,570 1,793 5,3 2,934 1,445 4,3 3,536 1,477 5,0 | | | |
| | | Index numb | ers of nominal value | (Base : 1929 | = 100) 1 | | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | | * 91 100 81 63 45 41 43 | 88 100 93 80 62 | 109 100 90 70 57 69 | 83 100 89 69 56 57 | 94 100 100 90 69 57 65 73 | | |
| | | Index num | bers of real value (I | Base : 1929 | = 100) 1 | | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | * * * (100) (95) (86) (90) (102) | (93) (100) (87) (75) (58) (58) (66) (71) | (90) (100) (100) (94) (81) | 112 100 91 98 96 126 | 90 90 98 94 105 | 105 103 100 91 98 96 119 139 | | |
| | Total number of p | persons or full-ti | me workers covered b | y the statis | tics (000's om | uitted) | | |
| | * | * | Full-time workers | | Persons | | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | : | * | 1,141 1,740 1,865 1,708 1,479 1,211 1,087 | 190 180 177 151 132 133 164 185 | 24 26 24 23 20 19 21 23 | 214 206 201 174 152 152 185 208 | | |

¹ Except for series in italics: base: nearest possible year to 1929.

| | Switzerland | Сzеснові | LOVAKIA | Uni | ON OF SOUTH | AFRICA | |
|--|--|---|---|---|---|--|--|
| | Social insurance statistics | Social insurar | | Stat | istics of pro | duction | |
| Year 1 | Ind., some transp., | Accident ins. Mines, ind., some transp., comm., | transp., comm., | | Industries | | |
| | Wage earners, salaried empl. | Wage earners, salaried empl. | Wage earners | Wage earners | Salaried employees | Wage earners | |
| | · · · · · · · · · · · · · · · · · · · | otal wages and sal | · | ' <u> </u> | · | , satured cimp | |
| | | A: | mount (to neares | t million) | | | |
| | Frs. | Kč. | Kč. | £ | £ | £ | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 1,964 2,110 2,251 2,271 2,190 1,993 1,922 1,910 | 12,265 14,054 14,847 14,311 13,215 11,198 | * 14,364 14,031 12,930 10,986 9,456 9,186 9,168 | 20.35 21.36 22.36 23.16 * 17.63 21.55 | 3.78 3.91 4.16 4.37 * 4.25 4.85 | 24.13 25.27 26.52 27.53 * * 21.88 26.40 | |
| | | Index number | s of nominal valu | e (Base : 1929 | = 100) | · | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 87 94 100 101 97 89 85 85 | 83 95 100 96 89 75 — | * 100 98 90 76 66 64 | 91 96 100 104 * * 79 96 | 91 94 100 105 * 102 117 | 91 95 100 104 * * 82 100 | |
| | | Index num | bers of real value | (Base : 1929 = | 100) | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 88 94 100 103 104 103 105 106 | (84) (97) (100) (99) (95) (82) ———————————————————————————————————— | (100) (100) (100) (96) (83) (73) (71) (70) | 91 95 100 106 * * 90 109 | 91 94 100 108 * 117 132 | 91 95 100 106 * 94 112 | |
| | Total number of | persons or full-time | workers covered | by the statistic | s (000's omitted | 1) | |
| | Full-time | Full-time workers Number | | d Persons | | | |
| 1927 1928 1929 1930 1931 1932 1933 1934 1935 | 651 703 743 729 688 627 620 | 1,475 1,650 1,713 1,643 1,535 1,327 | 2,506 2,445 2,310 2,067 1,885 1,879 1,918 | 187 191 200 200 * 173 208 | 16 17 18 18 * * 19 21 | 203 208 218 218 * * 192 229 | |

¹ Calendar year, except for the Union of South Africa: until 1930, business year ending not later than 30 June of the year indicated; from 1933, business year ending not later than 31 December.

Notes on Sources and Methods

- Germany: (a) Amtliche Nachrichten für Reichsversicherung (Reichsarbeitsblatt, IV. Teil) (Reichsarbeitsministerium). (b) Vierteljahrshefle zur Statistik des deutschen Reichs, and Wirtschaft und Statistik (Statistisches Reichsamt).
- (a) Social insurance statistics. Statistics based on the annual reports of the Federal Insurance Office on the application of compulsory insurance against industrial accidents. Insurance is compulsory for all persons employed in the establishments liable to insurance; all branches of economic activity are covered, but the statistics do not include agriculture. During the period considered, however, the scope of the scheme was slightly modified; since 1932 it has included in particular partially unemployed workers working without pay on the construction of small urban dwellings and persons employed by the Voluntary Labour Service. The total of wages and salarics paid to the insured during the complete calendar year is based on the employers' declarations; for insured persons earning over RM. 8,400 a year, however, only the insured maximum of RM. 8,400 (reduced to RM. 7,200 since 1 January 1934) is included in this total. The number of persons insured represents the approximate total number of persons liable to insurance at the end of each year.
- (b) Estimates of earned incomes. Statistics based on the results of quarterly and yearly estimates made by the Federal Statistical Office of the total income of all persons in receipt of wages and salaries, excluding pensions. The total of wages and salaries of wage earners and salaried employees is determined on the basis of the contributions to compulsory insurance against invalidity, old age, and death, by applying the percentage rate of contribution fixed for each wage and salary class to the total amount of contributions received for that class. The salaries of public officials are taken from the budget of the public administrative departments of the State, the cities, and the communes. Lastly, the salaries of employees not liable to compulsory insurance against invalidity, old age, and death and earned incomes other than those already mentioned are in general estimated on the basis of the yield of the tax on earned income, industrial enquiries, and other estimates.

Australia: Summary of Australian Production Statistics, and Official Year Book of the Commonwealth of Australia (Commonwealth Bureau of Census and Statistics).

Statistics of production. Statistics based on the results of an annual enquiry into production in manufacturing industry, covering all establishments employing at least 4 persons or using mechanical power. The totals of wages and of salaries paid to all employed persons cover the business year from 1 July of each year to 30 June of the following year. The average number of persons employed is obtained by dividing the sum of the numbers recorded each week of the business year by 52. For the years prior to 1928-29, however, the divisor for each establishment was the number of weeks actually worked. The number of persons employed includes outworkers or home workers, and also working proprietors. The earned incomes of the latter are not, however, included in the total of salaries.

Austria: Statistisches Handbuch für den Bundesstaat Österreich (Bundesamt für Statistik); Communication from the Bundesministerium für soziale Verwaltung.

Social insurance statistics. Statistics based on the annual reports of the funds for compulsory insurance against industrial accidents. Insurance is compulsory for all persons employed in mining, industrial, and commercial establishments, and also for mechanised agricultural undertakings and the State railways. The total of wages and salaries paid to the insured during the complete calendar year is based on the employers' declarations. Since 1929, however, for insured persons earning over Sch. 2,400 a year, only the insured maximum of Sch. 2,400 is included in the total (in 1928 the limit was Sch. 2,350 and in 1927 it was Sch. 2,100). The theoretical number of full-time workers is obtained by dividing the total number of man-days worked during the year in the establishments liable to insurance by 300.

Canada: Statistics of Manufactures, Advance Report on the Manufacturing Industries, 1934, and The Canada Year Book (Dominion Bureau of Statistics).

Statistics of production. Statistics based on the results of an annual census of production in manufacturing industry, covering all establishments, irrespective of the number of persons employed. The totals of wages and of salaries paid to all employed persons cover the complete calendar year. The average number of persons employed is obtained by dividing the sum of the totals shown on the payrolls at the fifteenth of each month by 12. Up to 1930, however, the divisor for each establishment was the number of months in actual operation. Piece workers working at home are not covered by these statistics.

Estonia: Résumé rétrospectif 1920-1930, and Recueil mensuel de statistique (Central Office of Statistics).

Statistics of production. Statistics based on the results of an annual enquiry into "production and labour in large industrial establishments", covering all establishments employing at least 20 workers. The total of wages paid to all wage earners employed covers the complete calendar year. The average number of wage earners employed is obtained by dividing the sum of the numbers recorded at the end of each month by 12.

- United States of America: (a) Census of Manufactures (U.S. Department of Commerce); Monthly Labour Review (U.S. Bureau of Labour Statistics). (b) Statistical Abstract of the United States, and Survey of Current Business (U.S. Department of Commerce).
- (a) Statistics of production and of payrolls. Statistics based on the results of a biennial census of production in manufacturing industry, covering all establishments having products valued at \$5,000 a year or more. The total of wages paid to all wage earners employed covers the complete calendar year. The average number of wage earners employed is obtained by dividing the sum of the totals recorded at the pay period nearest to the fifteenth of each month by 12.

The figures for intervening years, given to complete the preceding series, are taken from monthly statistics of payrolls giving the total amount of wages paid during a week of each month, in a certain number of selected establishments in manufacturing industry, the "trend" of which has been adjusted every two years to that of the series obtained by the above biennial census of production. As adjusted figures for 1933 have not yet been published, the data given here for 1934 and 1935 are not strictly comparable with the rest of the series. The original data showing the average amount of wages paid during a week in each year have been multiplied by 52 by the International Labour Office so as to obtain approximate yearly totals.

- (b) Estimates of earned income. Statistics taken from the official estimates of earned income, based mainly on the income tax returns, the censuses of production, certain industrial statistics, and the Budget appropriations for officials. The series chosen represent (i) the totals of wages and of salaries in a certain number of selected industries, for which the incomes of wage earners and of salaried employees can be determined separately; these industries include mining, manufacturing, construction, and railway and water transportation; (ii) estimates of earned income (total labour income) in general, including, in addition to the industries just mentioned, all economic branches in which it is not possible to distinguish between wages and salaries, and also labour costs for work relief, employee's pensions, and compensation for injury.
- Finland: (a) Industristatistik, and Annuaire statistique de Finlande (Central Bureau of Statistics). (b) Communication from the Central Bureau of Statistics.
- (a) Statistics of production. Statistics based on the results of an annual enquiry into production, covering all mining and industrial establishments employing in principle at least 10 workers or using mechanical power (1 horse-power being taken as equivalent to 3 workers). The enquiry also covers establishments whose output is valued at not less than F.Mks.100,000 a year, even if they employ less than 10 workers. The total of wages paid to all wage earners employed covers the complete calendar year. The average number of wage earners is obtained in each

industry by dividing the sum of the numbers recorded at the beginning of each quarter by the number of quarters for which the establishments were working.

- (b) Social insurance statistics. Statistics based on the annual reports of the Industrial Accident Insurance Company, the principal institution for the application of the compulsory industrial accident insurance scheme. Insurance is compulsory in the case of all manual work performed for another person in return for remuneration or as an apprentice. All the persons insured with the said Company are wage earners in industry. The total of wages paid to the insured during the complete calendar year is based on the employers' declarations. The theoretical number of workers, designated "yearly workers", is the equivalent number of full-time workers working regularly all the year.
- France: (a) Rapports sur l'application générale de la loi sur les accidents du travail (appendix to the Journal Officiel); Communication from the Direction des assurances privées (Ministère du Travail). (b) Revue d'Economie politique (studies by Mr. Dugé de Bernonville on private incomes); Communication from Mr. Dugé de Bernonville (Sub-Director of the Statistique générale de la France).
- (a) Social insurance statistics. Statistics based on the annual reports of the industrial accident insurance institutions. Insurance extends to all persons employed in establishmen's belonging to most branches of economic activity. As insurance is not compulsory, however, a large number of workers are not included in the statistics, notably the workers employed in large establishments (in particular mines and railways), for whom the accident risk is carried by the establishments themselves. The total of wages and salaries paid to the insured during the complete calendar year is based on the employers' declarations. The total number of persons covered by the legislation on compensation for industrial accidents is estimated at 10,309,000 for 1932.
- (b) Estimates of earned income. Statistics based on the results of the estimates made by Mr. Dugé de Bernonville of the aggregate income of wage earners, salaried employees, and public officials. For agriculture, mines, and industries, the totals are obtained by combining the results of the different enquiries into and statistics of average wages with the results of the census of occupations of 1926 and 1931 and with estimates of the gainfully occupied population in these branches for the other years; for railways the data are based on the figures shown in their accounts for expenditure on staff, and for the other public services on the aggregate totals of wages, salaries, and allowances taken from the Budget reports. The total number of persons covered is estimated at 13,695,000 in 1931, including unemployed.
- Great Britain and Northern Ireland: The National Income, 1924-1931 (London, 1932), and articles in the Economic Journal (1933, No. 170, and 1934, No. 175), by Mr. Colin Clark.

Estimates of earned income. Statistics based on the results of the estimates made by Mr. Colin Clark of the aggregate income of wage earners, salaried employees, and public officials. These estimates are obtained by using various statistics: (a) for wages and salaries, the earnings enquiries of 1924 and 1928, various estimates of wages and salaries, the statistics of the censuses of production and of the income tax, as well as, for intervening years, the wages index number of Professor Bowley; (b) for the numbers of wage earners and salaried employees, social insurance statistics and the results of the population censuses.

- Hungary: (a) Annuaire statistique hongrois (Central Office of Statistics). (b) Bericht über die ungarische Wirtschaftslage (Ungarisches Institut für Wirtschaftsforschung), and Communication from the Institut für Wirtschaftsforschung.
- (a) Statistics of production. Statistics based on the results of an annual enquiry into production, covering all manufacturing establishments using mechanical power and employing at least 10 workers, or not using mechanical power but employing at least 20 workers. The totals of wages and of salaries paid to all employed persons cover the complete calendar year; they include the value of payments in kind. The average number of wage earners employed is obtained by dividing the sum of the numbers recorded each week by 52; for salaried employees and all employed persons the figure given is the number recorded on I October of each year.

(b) Social insurance statistics. Statistics based on quarterly estimates based on the sickness insurance statistics and covering all wage earners in industries and handicrafts. The total of the wages paid on the last day of each quarter is determined by multiplying the average daily wage in each of the twelve wage classes specified in the insurance scale by the number of insured workers in that class; each of these partial totals is then multiplied by 300 to obtain an estimate for the whole year, and a simple arithmetic average of these four estimates is then taken. The number of workers is a simple arithmetic average of the number of insured registered with the National Social Insurance Institution at the end of each quarter.

Irish Free State: Census of Industrial Production Reports, Statistical Abstract, and Irish Trade Journal (Department of Industry and Commerce); Communication from the Statistics Branch.

Statistics of production. Statistics based on the results of a periodical census of production, extending in principle to all industrial establishments; certain establishments, however, are covered only if the value of their gross output reaches a minimum varying from £300 to £5,000 a year. As the industries and establishments covered by this census have been modified in the course of the period considered, data for a limited number of establishments have been selected so as to give a comparable series. The totals of wages and of salaries paid to all persons employed in these establishments cover the complete calendar year. The average number of wage earners is obtained up to 1931 by dividing by 5 the sum of the numbers recorded at five pay weeks, in February, May, August, October, and November respectively. The numbers of salaried employees, and from 1932 onwards of wage earners, refer to the pay week nearest mid-October. The total number of wage earners and salaried employees, calculated by the International Labour Office, is the sum of the figures for the two groups.

Latvia: Annuaire statistique de la Lettonie (Bureau of Statistics).

Statistics of production. Statistics based on the result of an annual enquiry into production, covering industrial establishments employing at least 5 workers or using mechanical power. The total of net wages and salaries paid to all employed persons covers the complete calendar year. The average number of workers employed is the sum of the figures obtained in each establishment by dividing the total number of workers recorded in the course of each quarter by the number of quarters in which the establishment was working.

Norway: Norges industriproduksjonsstatistikk (Central Statistical Office), and Communication from the Central Statistical Office.

Statistics of production. Statistics based on the result of an annual enquiry into production, carried out in all industrial establishments liable to industrial accident insurance and employing in principle at least 5 workers. In industries in which there are a large number of small establishments, however, the limit of the number employed is lowered so as to obtain a choice of representative establishments. The totals of wages and of salaries paid to all employed persons cover the complete calendar year. The average number of wage earners (including foremen) is obtained by dividing the sum of the numbers recorded at the end of each month by 12; the number of salaried employees is the number recorded at the end of the year. The total number of wage earners and salaried employees, calculated by the International Labour Office, is the sum of the figures for the two groups.

New Zealand: Statistical Report on Factory and Building Production, and New Zealand Official Year Book (Census and Statistics Office).

Statistics of production. Statistics based on the results of an annual census of production covering manufacturing establishments employing at least 2 persons or using mechanical power, and also a certain number of establishments not satisfying either of these conditions. The total of wages and salaries paid to all employed persons covers the fiscal year from 1 April of each year to 31 March of the following year. The average number of persons employed is obtained by dividing the sum of the numbers recorded in the course of each month of the year in question by 12. This number includes working proprietors, whose earned incomes are not however included in the total of wages and salaries.

Netherlands: Annuaire statistique des Pays-Bas (Central Bureau of Statistics), and Communication from the Central Bureau of Statistics.

Social insurance statistics. Statistics based on the annual reports of the State Industrial Accident Insurance Fund. Insurance is compulsory for all persons employed in mining, industrial, and commercial establishments, and also for wage earners in the service of the State (railways, State mines, etc.). The total of wages and salaries paid to the insured during the complete calendar year is based on the employers' declarations. For insured persons earning over Fl.8 a day, however, only the insured maximum of Fl.8 is included in the total, while on the other hand the wage of insured persons earning less than Fl.1.50 a day is reckoned as Fl.1.50. The theoretical number of full-time workers is obtained by dividing the total number of man-days worked during the year in the establishments liable to insurance by 300.

- Poland: (a) Statistique industrielle (Central Office of Statistics). (b) Statystyka Pracy (Central Office of Statistics). (c) Annuaire statistique de Pologne (Central Office of Statistics). Communication from the Central Office of Statistics.
- (a) Statistics of production. Statistics based on the results of an annual enquiry into production, covering industrial establishments which have paid for the licence and employing, as a general rule, at least 5 workers. The total of wages and salaries paid to all employed persons covers the complete calendar year; but as the industries and establishments covered by the enquiry have been considerably modified in the course of the period considered, the figures are not comparable from one year to another. A series of approximate indexes, calculated on a homogeneous basis for the period 1930-1934, has been communicated to the International Labour Office by the Central Office of Statistics.
- (b) Statistics of payrolls. Statistics based on monthly returns of payrolls in all establishments in the mining and metal-working industries, and in establishments in manufacturing industries employing at least 20 wage earners. On the basis of data on the total amount of wages paid, either during the whole of each month or during the last pay period of each month, a series of indexes has been computed by the Central Office of Statistics on the base 1928 = 100, and transferred by the International Labour Office to the base 1929 = 100.
- (c) Social insurance statistics. Statistics based on the annual reports of the industrial accident insurance institutions. Insurance is compulsory for all persons employed in establishments belonging to most branches of economic activity, but the statistics do not cover agriculture. The total of wages and salaries paid to the insured during the complete calendar year is based on the employers' half-yearly declarations. For insured persons earning over Zi.1,740 a year, however, only the insured maximum of Zi.1,740 is included in this total. The theoretical number of full-time workers is obtained by dividing the total number of man-days worked during the year in the establishments liable to insurance by 300.

Rumania: Bulletin statistique de la Roumanie (State Institute of General Statistics), and Communication from the Institute.

Statistics of production. Statistics based on the results of an annual enquiry into production, covering industrial establishments employing at least 20 workers and using mechanical power of more than 5 h.p. The totals of wages and of salaries paid to all employed persons cover the complete calendar year. The total number of persons employed is calculated from the numbers shown on the payrolls at the end of each year.

Switzerland: Jahresbericht und Jahresrechnung (Caisse nationale suisse d'assurance en cas d'accidents du travail), and Communication from the same Fund.

Social insurance statistics. Statistics based on the annual reports of the Swiss National Accident Insurance Fund. Insurance is compulsory for all persons employed in private establishments in industry, transport, and commerce which are regarded as "factories", i.e. which employ at least 5 workers. The total of wages and salaries actually earned by the insured during the complete calendar year is based on the employers' declarations. For insured persons earning over Frs. 6,000 a year, however, only the insured maximum of Frs. 6,000 is included in the total.

The theoretical number of full-time workers is obtained by dividing the total number of man-hours worked in the course of the year in the establishments liable to insurance by 2,400.

Czechoslovakia: (a) Rapports (Statistical Office of the Czechoslovak Republic), and Communication from the Statistical Office. (b) Socialni Revue (Ministry of Social Welfare).

Social insurance statistics. (a) Statistics based on the annual reports of the industrial accident insurance funds. Insurance is compulsory for all persons employed in mining, industrial, and commercial establishments, and in some branches of transport. The total of wages and salaries actually paid to the insured during the complete calendar year is based on the employers' declarations. For insured persons earning over Kč. 12,000 a year, however, only the insured maximum of Kč. 12,000 is included in the total; further, the wage of apprentices earning less than Kč. 2,250 a year is reckoned as Kč. 2,250. The theoretical number of full-time workers is obtained by dividing the total number of man-days declared by the employers by 300.

(b) Statistics based on the monthly data of the sickness insurance institutions under the supervision of the Central Social Insurance Institution. They cover all wage earners belonging to most branches of economic activity, except mines, State railways, and public administration. The statistics give the total of insured wages per day, i.e. the sum of the products obtained by multiplying the average wage for each of the ten wage classes of the insurance scheme by the number of insured persons in that class (the upper class, however, being limited to the maximum wage of Kc. 36 a day). The total of insured wages per day has been multiplied by 300 by the International Labour Office in order to obtain an approximate yearly total. The average number of wage earners insured is obtained by dividing the sum of the numbers reported as insured during each month by 12.

Union of South Africa: Census of Industrial Establishments (Office of Census and Statistics), and Communication from the Office of Census and Statistics.

Statistics of production. Statistics based on the results of a periodical census of production, covering all industrial establishments employing at least 3 workers or using mechanical power or boilers for steam-heating purposes. The totals of wages and of salaries paid to all employed persons cover the business year ending not later than 30 June until 1929-30, and not later than 31 December from 1933 onwards. The number of workers employed is the number recorded at the end of each annual period. This number includes home workers, and also working proprietors. The earned incomes of the latter are not however included in the total of salaries.

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Book Notes

INTERNATIONAL PUBLICATIONS

International Labour Office. Partial Revision of the Minimum Age (Sea) Convention 1920 (No. 7). International Labour Conference, Twenty-second Session, Geneva 1936. Geneva, 1936. 23 pp.

The Governing Body of the Office decided at its Seventy-sixth Session in June 1936 to place on the agenda of the Twenty-second (Maritime) Session of the International Labour Conference, which is to open in Geneva on 22 October 1936, the following question: Partial revision of the Minimum Age (Sea) Convention, 1920, with reference to the following points: (1) the raising of the minimum age from 14 to 15 years and any related revision of the exceptions provided in the Convention; (2) substitution for Articles 5-12 of the 1920 Convention of the standard Articles included in the Draft Conventions submitted to the Conference at its Twenty-First Session. This report contains an outline of the history of the proposals for amendment of this Convention, together with the observations of 37 Governments and the text of the draft amendment proposed by the Office, which is accompanied by an explanatory note. An appendix contains the text of the original Convention adopted in 1920.

- Safety Provisions for Workers in the Building Industry with reference to Scaffolding and Hoisting Machinery. International Labour Conference, Twenty-third Session, Geneva, 1937. First Item on the Agenda. Questionnaire I. Geneva, 1936. 47 pp.
- Reduction of Hours of Work in the Textile Industry. International Labour Conference, Twenty-third Session, Geneva, 1937. Second Item on the Agenda. Questionnaire II. Geneva, 1936. 47 pp.

The questionnaire on safety provisions for the building industry is accompanied by the text of the report of the Committee set up by the Twentieth Session of the Conference to deal with this subject, the text of the draft Model Safety Code drawn up in collaboration with the Office by the Correspondence Committee on the Prevention of Accidents, and a commentary designed to facilitate the task of Governments in deciding on their replies. The questionnaire on hours of work in the textile industry is also accompanied by a commentary, together with a summarised account of the discussions on the question of the reduction of hours of work in the textile industry which took place in plenary sitting of the Twentieth Session of the Conference and the reports adopted by the Committee set up by the Conference to consider the question.

Fédération internationale des associations d'instituteurs. International Federation of Teachers' Associations. Internationale Vereinigung der Lehrerverbände. Dix ans d'activité internationale. Ten Years of International Activity. Zehn Jahre internationale Tätigkeit. 236 pp.

Sixth International Congress for Scientific Management, London, July 15th to July 20th 1935. Agricultural Section Papers. 151 pp. The Home on the Holding or Scientific Home Management in Agricultural Areas. The British Rural Committee. 9 pp. Development Section Papers. 217 pp. Distribution Section Papers. 130 pp. Domestic Section Papers. 190 pp. Educational and Training Section Papers. 123 pp. London, P. S. King, 1935.

OFFICIAL PUBLICATIONS

AUSTRIA

Magistrat der bundesunmittelbaren Stadt Wien. Die Ergebnisse der Erhebung der Wohnungsverhältnisse in Wien am 22. März 1934. (Amtliches Quellenwerk.) Vienna, Leipzig, Deutscher Verlag für Jugend und Volk. 253 pp., map.

This report of the housing census carried out in Vienna on 22 March 1934 shows the changes in the housing situation in that town between 1910 and 1934. The number of dwellings increased by 27 per cent., while the number of inhabitants per dwelling decreased from 4.14 to 3.03. Detailed data are supplied concerning the standard of comfort provided, water supply, gas, electricity, etc.

CANADA

Department of Labour. The Relief Act, 1935. Report of Dominion Commissioner of Unemployment Relief, March 31, 1936. Ottawa, 1936. 36 pp.

A report setting forth statements of expenditure, guarantees, and obligations under the Relief Act, 1925; it also contains additional information on the administration of the Act, which expired on 31 March 1936, and shows the expenditure made under the relief legislation of 1930, 1931, 1932, 1933, and 1934.

Dominion Bureau of Statistics. (a) Racial Origins of Gainfully Occupied Ten Years of Age and Over for Canada and the Provinces. 23 pp. (b) Birthplaces of Gainfully Occupied Ten Years of Age and Over for Canada and the Provinces. 61 pp. Seventh Census of Canada, 1931. Bulletins No. XLV and No. XLVI. Ottawa, 1935.

DENMARK

Indberetning til Socialministeriet om arbejdsanvisningenog ar bejdslöshedsforsikringen m.m. i regnskabsaaret 1934-35 (fra 1. April 1934-31. Marts 1935). Copenhagen, 1936. 89 pp.

Report on the activities of the unemployment insurance funds and public employment exchanges in Denmark for the period 1 April 1934 to 31 March 1935.

FRANCE

Ministère du Travail. Prévoyance sociale; lutte contre le chômage; protection du travail et de l'épargne (Décrets pris par le Ministre du Travail de juin à novembre 1935 et projets déposés). Paris, 1936. 50 pp.

Contains a series of circulars summarising and commenting on the decrees recently published in France on social insurance, mutual aid societies, and miners, the struggle against unemployment (public works, restrictions on the employment of foreign workers, repatriation of the surplus of foreign workers), labour protection (measures in favour of handicraftsmen and co-operative societies), and protection of savings.

GREAT BRITAIN

Board of Education. Welsh Department. Technical Education in North Wales. Education in Wales. Memorandum No. 3. London, H.M. Stationery Office, 1936. 54 pp. 1s.

Deals with the organisation of technical education in a relatively small area, but one in which a surprising variety of occupations is found. This has called for

the provision of facilities for technical education, both full-time and part-time, in many branches of industry, as well as in commerce, domestic science, arts and crafts, and rural occupations. In this connection, certain problems have arisen, and the pamphlet shows how they have been approached and the results attained.

Committee of the Privy Council for Medical Research. Report of the Medical Research Council for the Year 1934-1935. London, H.M. Stationery Office, 1936. 183 + xI pp. 3s.

The work of the Medical Research Council during the year reviewed included enquiries into industrial pulmonary disease and the toxicity of industrial solvents. With regard to pulmonary diseases, researches were made into the physical nature of dusts, their measurement, chemical properties, and biology. The report also mentions investigations concerning the aetiology of respiratory diseases among cotton operatives, and the pathology of silicosis and allied diseases, experimental researches into the relation between bronchitis and the development of silicosis, a study of silicosis and asbestosis, and clinical and pathological researches into lung diseases among coal miners. Investigation into the toxicity of industrial solvents was made at the request of the Home Office by a special committee. A chapter of the report is devoted to the activities of the Industrial Health Research Board; it mentions the investigations made into the physiology of muscular work, industrial psychology, occupation and gastric disease, and environmental conditions in industry (heating and ventilation, noise, lighting).

Department of Scientific and Industrial Research. The Transmission of Light through Window Glasses. Illumination Research. Technical Paper No. 18. London, H.M. Stationery Office, 1936. IV + 18 pp., illustr. 9d.

Describes the results of the measurement of the transmission factors of 49 different kinds of window glass under three different conditions as regards the distribution of the incident light: (1) direct light incident normally on the glass; (2) completely diffused light; (3) light restricted to angles of incidence between 45° and 90°. Numerous photographs are included.

Medical Research Council. Industrial Health Research Board. Incentives: Some Experimental Studies. By C. A. MACE. Report No. 72. London, H.M. Stationery Office, 1935. IV + 69 pp., illustr. 1s.

A laboratory experimental study of the problem of effort carried out by means of different tests; simple and complex computation, Whipple's aiming test, and the ball and slot test. These tests, the experiments made and their results are described in detail. The pamphlet ends with some considerations on the industrial application of some of the conclusions reached, the object of the experiments being to determine the standard of effort which may reasonably be expected of a worker during his working day, and how it may be attained without depriving the worker of sufficient energy to enjoy the pursuits of leisure.

— — The Prognostic Value of Some Psychological Tests. By E. Farmer and E. G. Chambers. Report No. 74. London, H.M. Stationery Office, 1936. IV + 50 pp. 9d.

Study of certain tests applied in vocational guidance, carried out more especially with a view to showing the relations between the different psychological functions. The first part deals with the relations between the tests and industrial proficiency. The second examines the value of various tests in different industrial groups. The third considers the correlation of different tests. The conclusions reached show that measurable psychological functions (except the simplest) are in some measure related to one another, and that this relation is not solely dependent on intelligence. There appears to be a mechanical factor related to, but different from, intelligence. It is involved in tests depending on manual or reasoned reactions to perceptual imagery. As the dominance of intelligence increases with the complexity of mental tests, so does the dominance of this mechanical factor increase with the complexity of mechanical tests.

ITALY

Istituto centrale di statistica. Indagine sulle abitazioni al 21 aprile 1931 — Anno IX. Parte Prima. Testo. Relazione del Prof. Alfredo NICEFORO. Florence, 1936. 1x + 175 pp. 25 lire.

The first part of this work contains a general account of the methods and results of enquiries relating to the question of dwellings in Italy: general and local censuses, local and private surveys. The second part, which contains the results of the census of 21 April 1931, gives information on the size of buildings, the density of inhabitants, comfort, overcrowding, and the social distribution of the inhabitants. Interesting diagrams relating to these questions are given in the third part. Tables showing the results of the census are given in the appendix.

JAPAN

Tokyo Shiyaku Sho. (Tokyo Municipal Government.) Shokugyo Shokai-Sho Shushokusha Chosa. (Second Enquiry on Persons placed by Employment Exchanges.) Tokyo, 1935. xxxiii + 485 pp.

Report of an enquiry carried out by the municipal employment exchanges of Tokyo regarding the workers placed by them during the years 1932 and 1933 and the first quarter of 1934. The data supplied in reply to the questionnaires sent to them relate to the age, sex, educational standard, and occupational experience of these workers, and their conditions of employment (wages, etc.). With regard to workers having left their jobs, data are given on length of service, conditions of dismissal, etc.

MALTA

Emigration Department. Annual Report 1935-36. Valetta, 1936. xxv pp.

This report was analysed in *Industrial and Labour Information*, Vol. LIX, No. 5, 3 August 1936, page 166.

RHODESIA (NORTHERN)

Native Affairs. Annual Report for the Year 1935. Lusaka, 1936. 96 pp. 2s. 6d.

For a summary of this report, see above under the heading "Reports and Enquiries".

RHODESIA (SOUTHERN)

Report of the Chief Native Commissioner for the Year 1935. With Reports of the Director of Native Education, the Agriculturist, Native Department, and the Chief Irrigation Engineer (on water supplies in Native Reserves). Salisbury, Govt. Stationery Office, 1936. 36 pp.

For a summary of this report, see above under the heading "Reports and Enquiries".

SPAIN

Ministerio de Agricultura. Dirección general de Agricultura. Annuario estadistico de la producciones agricolas. Año 1933 y 1934 para los agricos y el divo. Madrid, 1934. vi + 371 pp.

—— Tres estudios económicos. Apéndice al Anuario estadístico de las producciones agrícolas. Año 1933. Madrid, 1934. 111 + 196 pp.

SWITZERLAND

ZURICH

Statistisches Bureau. I. Die Arbeitslosen im Kanton Zürich. II. Die Entwicklung der Bautätigkeit in den grösseren Gemeinden 1921-35. Statistische Mitteilungen des Kantons Zürich Nr. 186. Zurich, 1936. 36 pp. 2 francs.

Report of the Statistical Office of the canton of Zurich on: (1) an enquiry into

the living conditions of the unemployed in that canton at the beginning of 1936; (2) the activities of the building industry in the principal localities of the canton during the years 1921 to 1935.

UNION OF SOUTH AFRICA

Department of Public Health. Central Housing Board. Report for the Calendar Year ended 31 December 1935. Pretoria, Govt. Printer, 1936. 29 pp. 1s. 9d.

This report deals principally with the application of the Elimination of Slums Act of 21 June 1934. Chapter III contains an account of the housing surveys carried out in this connection in Bloemfontein, Capetown, Durban, East London, Johannesburg, Pietermaritzburg, Pretoria, and Port Elizabeth.

UNITED STATES

Co-ordinator for Industrial Co-operation. Council for Industrial Progress. Reports of Committees and Resolutions adopted 12 March 1936. Washington, Govt. Printing Office, 1936. 53 pp.

In the autumn of 1935, some time after the invalidation of the N.R.A. Codes by the Supreme Court, the President of the United States of America established the office of the Co-ordinator for Industrial Co-operation. The Co-ordinator's duties were "to supervise, subject to the direction of the President, conferences of representatives of industry, labour, and consumers for consideration of the best means of accelerating industrial recovery, eliminating unemployment, and maintaining business and labour standards." In pursuance of this task, the Co-ordinator for Industrial Co-operation caused industry and round-table conferences to be held, and a Council for Industrial Progress to be formed. On 12 March 1936, this Council adopted seven reports submitted by the Committees on: National Industrial Policy; Maximum Work Week, General Wage, and Child Labour; Fair Trade Practices; Internal and External Competition; Anti-Trust Laws (including the Federal Trade Commission Act); Financial Aid to Small Enterprise; Government Competition with Private Enterprise. These reports constitute an interesting sequel to the history of the N.R.A. experiment.

Department of the Interior. Bureau of Mines. Review of Literature on Effects of Breathing Dusts with Special Reference to Silicosis. Part III-A. Chapter 5. Economic and Legal Aspects of Dust Disease in Industry (Sections 1 and 2). By D. Harrington and Sara J. Davenport. Information Circular 6857. Washington, 1935. Pp. 211-266.

The first part of this circular, which deals with the economic aspect of dust disease in industry, reviews the claims for compensations for silicosis brought before the courts in the United States. The second part examines the different medico-legal problems which may be raised in connection with medical examinations in claims for compensation for silicosis.

—— Office of Education. Federal Student Aid Program. By Fred J. Kelly and John H. McNeely. Bulletin 1935, No. 14. Washington, Government Printing Office, 1935. 39 pp. 5 cents.

Department of Labour. Twenty-third Annual Report of the Secretary of Labour for the Fiscal Year ended 30 June 1935. Washington, Govt. Printing Office, 1936. VII + 134 pp. 15 cents.

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| ingt | on, Govt. Pr | inter, 1936. | 15 pp. | | | | | | • |

[—] Consumers' Credit, and Productive Co-operation in 1933. By Florence E. Parker. Bulletin No. 612. Washington, Govt. Printing Office, 1935. vr + 80 + v pp. 10 cents.

- —— Division of Labour Standards. Discussion of Industrial Accidents and Diseases. 1934 Convention of the International Association of Industrial Accident Boards and Commissions, Boston, Massachusetts: Bulletin No. 2. Washington, Govt. Printing Office, 1935. VII + 282 pp. 20 cents.
- ————— Proceedings of the Twenty-third Annual Convention of the International Association of Public Employment Services, United States and Canada. Held in conjunction with the Secretary of Labour's Second National Conference on Labour Legislation, Asheville, North Carolina, October 6-7, 1935. Bulletin No. 5. Washington, Govt. Printer, 1936. 111 + 62 pp. 10 cents.
- Employment Service. Division of Standards and Research. Occupational Research Program. Job Specifications for the Cotton Textile Industry. June 1935. Washington, Govt. Printing Office, 1935. x11 + 254 pp., illustr.
- ---- Women's Bureau. A Brief History of the New York Minimum Wage Case. Washington, 1936. 11 pp. (typescript).

Treasury Department. Public Health Service. Anthraco-Silicosis among Hard Coal Miners. Public Health Bulletin No. 221. Washington, Govt. Printing Office, 1936. vi + 114 pp., illustr., tables. 25 cents.

Contains the results of researches undertaken by the United States Public Health Service at the request of the Governor of Pennsylvania, with a view to collecting data on pneumoconiosis in the anthracite mines district. The researches were carried out in three typical mines selected in three geological districts, and worked respectively by old, modern and semi-modern methods. A physiological and radiological examination was made of all the workers in these mines (2,711 persons), and information was collected on their occupational and medical history, and on the cause of death of the father of each person examined. The work includes numerous radiographs, diagrams and statistical tables.

U.S.S.R.

Gossudarstvennaja planovaja komissija Sojuza SSR (U.S.S.R. State Planning Commission). Osnovnić pokasateli narodnokhozjajstvennogo plana na 1936 g. (Basic Data of the Economic Plan for 1936). Moscow, 1936. 64 pp.

This work, which is designed for "a wide circle of readers", gives in a concise form the principal data relating to the Economic Plan for 1936, the final figures for 1934, and the provisional figures for 1935.

Centralnoé upravlenié narodno-khozjajstvennogo uceta Gosplana SSSR (Central Department of Economic and Social Statistics of the U.S.S.R. State Planning Commission). Trud v SSSR (1934 g.) ezegodnik (Labour Year-Book, 1934). Moscow, 1935. 392 pp. 12 roubles.

This statistical year-book contains data on working conditions in the U.S.S.R. in 1934. They relate in particular to: (1) the number of wage earners, average wages, and wage funds in the different branches of industry; (2) large-scale industry; (3) the building industry; (4) the sovkhozes (State farms) and the agricultural machine and tractor stations; (5) railway transport; (6) the carrying out of plans relating to the number of wage earners, average wages, and wage funds in industry; (7) membership of trade unions, the principal items of the State budget relating to the improvement of living conditions, the budget of the social insurance system, and workers' family budgets; (8) the wages of workers in large-scale industry arranged according to occupation and wage scales; (9) the distribution of wage earners according to nationality; (10) data on the time-table of workers employed on kolkhozes (collective farms).

— Zensčina v SSSR (Women in the U.S.S.R.). Moscow, 1936. 166 pp., tables, 3 roubles.

This volume, which is published under the direction of Mr. Kraval, head of the Central Department of Economic and Social Statistics of the U.S.S.R. State Planning Commission, gives much information on the position of women in the Soviet Union relating principally to the period of the first Five-Year Plan and the first years of the second Five-Year Plan. The work also contains an introduction showing the development of women's work in the U.S.S.R., about a hundred statistical tables bearing in particular on the position of women in the different branches of industry, and in transport, commerce, education, etc., the technical and cultural level of girls and young women, the changes in the living conditions of women, their participation in public affairs, and their place in the kolkhoze (collective farm).

Centralnoé upravlenié narodno-khozjajstvennogo uceta Gosplana SSSR i Centralnyj komitet vsesojuznogo leninskogo kommunisticeskogo cojuza molodezi (Central Department of Economic and Social Statistics of the U.S.S.R. State Planning Commission, and Central Committee of the Union of Communist Youth). Molodez SSSR (Youth in the U.S.S.R.). Statistical compilation published under the direction of A. V. Kossarev and I. A. Kraval. Moscow, 1936. 384 pp.

Published under the direction of the Secretary of the Central Committee of the Union of Communist Youth in the U.S.S.R. and the head of the Central Department of Economic and Social Statistics of the U.S.S.R. State Planning Commission on the occasion of the Tenth Congress of Communist Youth, this first statistical compilation devoted exclusively to problems of Soviet youth contains an introductory study on the position of young people before and since the October Revolution, and a number of statistical tables showing the place of young people in the economic and cultural life of the U.S.S.R.

NON-OFFICIAL PUBLICATIONS

Alcalá Zamora, Niceto. Reflexiones sobre las leyes de Indias. Madrid, 1935. 94 pp.

Mr. Alcalá Zamora traces a picture of the Spanish legislator's efforts at the time of the colonisation of American countries to give them a legislation which would protect Native rights. Although, he says, it is not possible to suppose that the legal protection afforded to the Indians at that time constituted a criterion of racial equality, yet it denoted a tendency towards assimilation. The author describes the regulation of work in mines, the manufacture of textiles, etc., instituted with a view to "preventing the exploitation of the Indians by the more powerful of every kind, who, through avarice, awaited an opportunity to confound in practice compulsory labour with personal servitude imposed as a punishment or a form of slavery."

Al-Schantawi, Hassan. Al-Amalo-oual-Ommâl Fi-Missr. Cairo, "Revue de la Faculté de droit", 1935. 231 pp.

This work, which forms a special number of the Revue de la Faculté de droit published in Cairo in Arabic, contains studies and articles by Egyptian jurists and statesmen dealing with the principal labour questions. In the preface, the author points out that the publications of the International Labour Office have been used as a basis for the study of many questions, and he expresses his thanks to Mr. Harold Butler, Director of the Office. The first part of the work concerns the history of the labour movement throughout the world and in Egypt. A special chapter deals with trade unionism, its development and present position. The second part contains studies on different branches of labour legislation; a special chapter is devoted to the International Labour Organisation. The third part considers the decisions of different courts relating to labour questions. The fourth part, by H.E. ABDUR-RAHMAN REZA Pasha, former Minister of Justice, describes the development and present position of social legislation in Egypt. This part of the work includes two appendices containing respectively the text in Arabic of the report presented in

1932 by Mr. Harold Butler to the Egyptian Government, and the text of the proposed Labour Act drafted by H.E. Abdur-Rahman Reza Pasha.

American Academy of Political and Social Science. The Constitution in the Twentieth Century. (Pamphlets.) You and Your Government Series XIII. New York.

A series of lectures by different authors presented by the Committee on Civic Education by Radio established by the National Advisory Council on Radio in Education and the American Political Science Association. It consists of reprints of articles published in *The Annals* of the American Academy of Political and Social Science and broadcast.

American Planning and Civic Annual. A Record of Recent Civic Advance including the Proceedings of the Conference on City, Regional, State, and National Planning, held at Cincinnati, Ohio, May 20-22, 1935, and Addresses selected from the National Conference on State Parks, held at Skyland, Va., June 18-21, 1935. Edited by Harlean James. Washington, 1935. x11 + 356 pp., illustr. \$2.

Andrews, John B. Administrative Labour Legislation. A Study of American Experience in the Delegation of Legislative Power. New York, London, Harper, 1936. 231 pp.

Arbeiterkrankenversicherungs-Kasse Wien. Bericht für das Jahr 1935. Vienna, 1936. 195 pp.

This report was analysed in *Industrial and Labour Information*, Vol. LIX, No. 2, 13 July 1936, pages 47-49.

A Social Survey of Plymouth. Foreword by Dr. J. J. Mallon. London, King, 1935. 36 pp. 1s. 6d.

Beilin, A. E. Kadry specialistov SSSR, ikh formirovanie i rost (Specialists and Technical Workers in the U.S.S.R., their Training and their Increase). Centralnoé upravlenié narodnokhozjajstvennogo uceta Gosplana SSSR (Central Department of Economic and Social Statistics of the U.S.S.R. State Planning Commission). Moscow, 1935. 420 pp. 8.25 roubles.

Mr. Beilin's work, to which Mr. Kraval, head of the Central Department of Economic and Social Statistics of the U.S.S.R. State Planning Commission, contributes a preface, is the first attempt to give a general picture of the efforts made in the U.S.S.R. to train and educate specialists and technicians under the Soviet economic system. The work deals in particular with the position of engineers and technicians since the time of the civil war down to the first years of the application of the second Five-Year-Plan in industry, agriculture, transport, commerce, and in the higher educational institutions, and with the position of women specialists.

Bohn, Frank. and Ely, Richard T. The Great Change. Work and Wealth in the New Age. New York, Thomas Nelson, 1935. v11 + 373 pp.

Bonnardel, R. Vision et professions. Publications du Travail humain. Série A. No. 6. Directeur Laugier. 166 pp. 25 frs.

Study and estimate of the visual aptitudes required for certain kinds of work. After recalling the importance of visual examinations in industry and in occupational guidance, the author considers in turn the problem of visual acuity and the classifications of occupations proposed by different authors. He then deals with the question of work by the blind, the weak-sighted, the one-eyed, and the strabismic, persons with abnormal sight (near sight, hypermetropia, astigmatism), the anomalies of colour blindness, and proneness to dazzlement. The last two chapters are devoted to occupational eye fatigue and the dangers to the eyes presented by certain occupations. The work ends with a table of the visual requirements of the principal occupations (558) with an indication in some cases of the dangers to the eyes that they involve. An abundant bibliography is included.

Building Industries National Council. Year Book for 1936. Report on the Work of the Council from its Inception, including Information Bearing upon the Functions and Constitution of the Council. London, 1936. 116 pp. 9d.

The creation of the Building Industries National Council in 1932 was largely due to the initiative of Sir Raymond Unwin. In addition to the report on the work of the Council, this first Year Book contains, in Appendix II, a summary of data already published in the Building Industries Survey, issued monthly by the Council. The data given show the development of building and the number of workers employed in the building and allied trades. Detailed statistics enable the reader to follow the growing relative importance of the building industry in the British national economy.

Bukharin, N. I., and others. Marxism and Modern Thought. London, George Routledge, 1935. viii + 342 pp.

Butler, H. B. Den ökonomiske of sociale Udvikling i 1935. Direktörens Aarsberetning til den Internationale Arbejdskonference Juni 1936. Samfundets Krav, 36. Aarg., Nr. 2, April Kvartal 1936. Kolding, Konrad Jörgensens Bogtrykkeri, 1936. 67 pp.

Abridged Danish edition of the Report of the Director to the Twentieth Session of the International Labour Conference, published by the Danish Association for Social Information.

Clada, S. G. 'I Anergia en 'Elladi. Athens, 1935. 48 pp.

In the first part of this book the author explains the causes of unemployment in Greece, where it does not present an exclusively economic character as it does in most industrially and economically developed countries. It is primarily a demographic phenomenon, and secondly a social one. The influence of technical progress is a relatively minor factor. In the second part he estimates the number of unemployed and analyses the living conditions of Greek workers. In the third, he describes the measures adopted by the State and the communes in favour of the unemployed: unemployment insurance funds, assistance, etc. Lastly he suggests certain measures designed to prevent and to combat unemployment.

Confederazione Fascista dei Lavoratori dell'Agricoltura. Azione, sviluppi e finalità. Attività confederale e sindacale 1º gennaio 1934-10 maggio 1935. Rome. 235 pp.

Edin, Karl Arvid, and Hutchinson, Edward P. Studies of Differential Fertility in Sweden. London, P. S. King, 1935. 116 pp.

Thanks to the excellent Swedish statistical methods, the authors have succeeded in showing that in Stockholm the fertility of the upper classes, regardless of whether these were defined in terms of occupational, economic or educational status, was higher for the period 1917-1930 than that of other groups of the population.

Faci, S. L'Algérie sous l'égide de la France contre la féodalité algérienne. Préface de Maurice Violette. 1936. En vente chez l'auteur, 22, rue Saint-Famille, Toulouse. IV + 290 pp. 12 frs.

Forguson, R. W. Training in Industry. A report embodying the results of enquiries conducted between 1931 and 1934 by the Association for Education in Industry and Commerce. London, Pitman, 1935. x + 32 pp.

Shows how some forty firms, from which detailed reports were received, train their employees and would-be employees. Fourteen of these reports are reproduced as appendices.

Fifty Years a Borough, 1886-1936. The Story of West Ham. Edited and compiled by Donald McDougall. 1936. 298 pp., illustr.

Galgano, Eduardo. La Scuola secondaria di avviamento professionale ovvero la Scuola del popolo italiano. Preface by Ezio M. Gray. Turin, 1934. VIII + 70 pp., illustr. 10 lire.

The author describes experiments made in vocational guidance during the past ten years, and explains the aim of the Italian Secondary School of Vocational Guidance, which is to give pupils from 10 to 14 years of age a compulsory education constituting a first preparation of a technical character for different trades, practical agriculture, and commercial and industrial employment. He shows that this school has a great social part to play, and he considers that it should be open especially to the poorer classes of the population.

Gault, Edgar H. Control of the Retail Units of Chain Stores. Michigan Business Studies. Vol. VII, No. 1. Ann Arbor, University of Michigan, 1935. v + 99 p. \$1.

Study of the control methods employed by the central offices of various types of American chain stores in managing their retail stores. The methods described include managerial control over merchandising, inventories, finances, and personnel.

Gierke, Dr. Otto Max von. Der Lebensversicherungsvertrag zugunsten Dritter nach deutschem und ausländischem Recht. Abhandlungen aus dem gesamten Handelsrecht, Bürgerlichen Recht und Konkursrecht. Beihefte der "Zeitschrift für das gesamte Handelsrecht und Konkursrecht". 7. Heft. Herausgegeben von Dr. Julius von Gierke, Dr. Wolfgang Kunkel, Dr. Hans Würdinger, unter Mitwirkung von Dr. Karl Wieland. Stuttgart, Ferdinand Enke Verlag, 1936. 98 pp. 3.20 marks.

Gillespie, James J. Training in Foremanship and Management. London, Pitman, 1934. XIII + 171 pp.

A good and practical textbook on industrial management, written for students, future foremen, and executives. It is based on a thorough study of Taylor's and Gilbreth's works and outlines many problems of the daily practice in the workshop. These problems are dealt with from the point of view of the foreman as well as of the manager. Practical methods for handling labour problems, such as fatigue and monotony, and wages and incentive systems are usefully described.

Goudriaan, Dr. I. J. De oorzaken der werkloosheid en de middelen ter bestrijding. Haarlem, H. D. Tjeenk Willink, 1936. 48 pp.

Text of the inaugural lecture given by the author as professor in the School for Higher Technical Studies at Delft, on the causes of unemployment and the means of combating it.

Guisan, Louis. La place du contrat collectif de travail dans le système de droit suisse. Essai de systématique juridique à propos des art. 322 and 323 C.O. Thèse de license et de doctorat présentée à la Faculté de droit de l'Université de Lausanne. Lausanne, 1936. 188 pp.

The author examines the notion of collective agreement in the light of the Swiss Code of Obligations. After considering the relevant legal provisions and theories, he reaches the conclusion that, from the standpoint of juridical logic, a collective agreement is a "monstrosity", and, from the legislative standpoint, that it "should be deleted from our legislation and give place to a conception of the organisation of labour relations based on individual value."

Hackert, Carl. Familienangehörige im Arbeitsrecht. Inaugural-Dissertation zur Erlangung der rechtswissenschaftlichen Doktorwürde einer Hohen Rechtsund Staatswissenschaftlichen Fakultät der Albert-Ludwigs-Universität zu Freiburg i. Breisgau. Bochum, Heinrich Pöppinghaus, 1934. 1v + 124 pp.

The object of this study is to show the effects in German law on the contract of employment of a wage earner resulting from his position as member of a family. The author deals in particular with the following questions: the right of a husband to terminate his wife's contract of employment, the right of a wife to terminate her contract of employment on her marriage, the contract of employment of children under and over 21, the contract of employment between husband and wife and between parents and children. Other questions dealt with concern the different forms of employment contract made to protect wages from seizure (for instance, by allocating that portion of wages which is liable for seizure to another member

of the wage earner's family). The study also contains chapters on the computation of taxes on the wages of a wife and children, on the employer's obligation to insure members of his family working in his undertaking against social risks, on the position of members of the employer's family in regard to the Act on works councils, on the Industrial Code (Gewerbeordnung), and on the Act relating to permanent invalidity (Schwerbeschädigtengesetz).

Heinrich, Gustav. Die Problematik der Sozialversicherung. Volkswirtschaft. Eine Schriftenreihe. Neue Folge, 4. Band. Berlin, Vienna, Zurich, Österreichischer Wirtschaftsverlag, 1936. 232 pp.

An original contribution to the study of the general problems of social insurance. regarded as an institution of social policy based on the principle of compulsory insurance. Without claiming to establish a complete theory, the author tries to define the social and economic functions of compulsory insurance. The principal chapters of the book deal with the following subjects: definition of compulsory insurance and its superiority over other methods of social intervention, such as non-contributory pensions and social assistance; the guarantee of a minimum of subsistence as the essential object of compulsory insurance; the reason and necessity for the principle of compulsion; the administrative organisation of compulsory insurance and the principles of administrative autonomy and State control; wage-paid work as basis and limit of compulsory insurance. The chapter on the effect of compulsory insurance on the general level of wages is of special interest. After explaining the difference between the legal or apparent incidence and the economic or real incidence of social insurance charges — contributions of insured persons and of employers, subsidies from public authorities — the author examines the effects of these charges on the play of demand and supply on the employment market. These effects, he says, are different for the low-wage categories of workers and for the better-paid categories; they vary also according to the risk covered. Insurance leads to an increase in wages — measured and moderate, it is true which in the last analysis is limited by the maximum output of which the national economy is capable.

Hotchkiss, Willis L. The Law of Wage Action. Cleveland (Ohio), Eaton Publishing Company, 1936. 238 pp.

Ingenieurschule Weimar. Praktikantenausbildung an der Ingenieurschule Weimar. Weimar, 1936. Illustr.

International City Managers' Association. Training for Municipal Administration. A Committee Report. Chicago, 1936. 20 pp.

Koch, Hermann. Lehrling, Lehrherr, Landwirtschaft. Berlin, Reichsnährstand Verlag. 106 pp.

Kokourek, Josef. Plan prace. Myslenkovy nastin účelné péče o nezamestnané. Brno, 1936. 48 pp., diagrams.

Analyses and interprets unemployment statistics in Czechoslovakia and outlines a scheme of public works.

Labadessa, Rosario. Storia e dottrina della cooperazione. Schema per un corso di lezioni. Rome, "La Formica". 197 pp. 10 lire.

This learned and thoughtful work presents, within a small compass and in a handy form, the discussions that illuminate co-operative theory and the principal events that mark its history. After describing some early forms of co-operative organisation and recalling the pioneers of the movement, the author gives a history of the development of the principal types of co-operative organisation and an account of their working. A discussion of theories of co-operation leads to the notion of the convergence of the multitudinous co-operative activities and to a comprehensive definition of co-operative association and co-operative undertaking.

Landauer, Edmond. Organisation scientifique. Edition posthume. Brussels, Comité national belge de l'organisation scientifique, 1935. $x_1 + 159$ pp.

This posthumous edition of the works of Edmond Landauer is due to the Belgian National Committee on Scientific Management, assisted by committees interested in questions of rationalisation in different European and American countries. It is a tribute to the memory of the late Vice-President of the International Committee on Scientific Management, whose works, bearing on the most varied subjects, have had a preponderating influence on the development of methods of management, and on the generalisation of their practical application. The volume begins with an introduction of a philosophical nature by Professor Mauro. It contains some twenty studies that at the time of their publication raised a keen interest in specialist circles. Some of them — "The control of the time factor in manufacture", and "Management from a distance", for instance — are justly regarded as classical pages in the literature of management. The last article in the volume, entitled "Questionnaire to serve for a systematic examination of the economic value of an industrial undertaking", is published for the first time. Each of these works proves once more that Edmond Landauer combined great subtlely of mind with a keen sense of realities.

Land Settlement Association. Land Settlement. March 1936, No. 4. Special Number. Being the First Annual Report for the Year ending 31 December 1935. London, 1936. 40 pp.

Lhotte, Céline, and Dupeyrat, Elisabeth. Révélations sur la santé des jeunes travailleuses. Les enquêtes de la J.O.C.F. Paris, Editions Spes, 1936. 191 pp. 7 frs.

Contains the results of an enquiry carried out by means of a questionnaire among young French Catholic women workers. The report is based on 9,000 out of 20,000 replies received. The first part examines in turn the living and working conditions of these workers, and dwells in particular on the problems of industrial accidents and occupational diseases. The second part deals with remedies, especially those suggested by the women workers themselves.

Macartney, C. A. World Planning. The I.L.O. and the New Economic Order. Being an account of a Conference held in London by the Industrial Advisory Committee of the League of Nations Union, February 18-20, 1936. 96 pp. 6d.

Mallart, José, and Esteras Gil, Santiago. Propaganda preventiva del accidente. Comité Nacional de Organización Científica del Trabajo. Madrid, Revista de Organización Científica. Illustr.

Metten, Helène F. L'exécution des commandes et le réapprovisionnement des magasins de produits finis. Comité national belge de l'organisation scientifique. Publication No. 14. Brussels, 1935. 11 pp., illustr. 8 frs.

The author describes the working of the department for the supply of spare parts at the Renault automobile works near Paris. Its principal duties are the execution of orders for goods, invoicing, the permanent inventory, and the passing of orders for renewal of stock. The problems involved have received simple and rational solutions that are applicable in any factory warehouse. They raise the efficiency of the staff and of the equipment employed to a high standard.

Miraldi, Giovanni. La morte per "perniciosa malarica" e l'assicurazione contro gli infortuni agricoli. Reprinted from L'Assistenza sociale agricola, Nos. 3-4, March-April 1936. Rome, 1936. 16 pp.

Mladenatz, G., and Oliva, Traian. Legislatia cooperatistà. Bucarest, 1935. xx + 353 pp. 200 lei.

This work, which deals with the Rumanian legislation on co-operative societies, contains the annotated text of the Act of 28 March 1929, as amended and completed by the Decrees of 4 April 1930, 7 April 1933, and 27 March 1935. Some sections of the Act, moreover, are rendered clearer by the reproduction of parliamentary debates and court decisions on the subject. A detailed alphabetical index makes the work easy to consult. The appendices reproduce the rules of the Rumanian Central Co-operative Bank and of the Central Agricultural Co-operative Society for Production, Supply, and Marketing, as in force at the time of the publication of this book, and the text of the Act of 11 October 1932 on the creation of a body of accountants and officials of co-operative societies.

Moede, Dr. Walther. Arbeitstechnik. Die Arbeitskraft. Schutz, Erhaltung, Steigerung. Stuttgart, Ferdinand Enke Verlag, 1935. xi + 267 pp., 145 diagrams, tables.

Morren, Dr. H. J. De Practijk der Werkloodsheidsverzekering in Nederland. Tweede Druk. Alphen, N. Samson, 1935. 276 pp.

Designed as a handbook for municipal and trade union officials dealing with the administration of unemployment insurance, this work is eminently practical and constitutes a detailed commentary on the Netherlands Unemployment Insurance Act, the text of which is reproduced in the appendix.

Muller, Albert. La politique corporative. Essais d'organisation corporative. Brussels, Editions Rex, 1935. 223 pp.

Father Muller, Professor at the Superior Commercial Institute of St. Ignatius at Brussels, describes the new forms of corporative economy which, in recent years, have come into being in Europe. After outlining what may be called the corporative system, he reviews in turn the experiments made in the Netherlands, Italy, Portugal, Germany, Austria, Switzerland, Spain, the United States, Bulgaria and Belgium. Two tendencies are discernible in the reforms accomplished in this field: in the first, the intervention of public authority is emphasised (State corporatism), while in the second a wider scope is allowed to the parties concerned (associative corporatism). For reasons which he explains, the author prefers the latter. This book, in which he expounds with thorough competence the Catholic social doctrine and the lessons to be drawn from these new experiments, is an excellent critical repertory of the different attempts made with a view to the adoption of a "corporative policy".

Nathan, Manfred. Workmen's Compensation in South Africa. The Workmen's Compensation Act of the Union (No. 59 of 1934) with Regulations, Forms and Schedules and Commentary. Durban, Butterworth, 1935. xvi + 171 + 14 pp.

The full text of the South African Workmen's Compensation Act of 1934 is given in this work, with explanatory notes on each section, followed by citations of cases decided in the Courts.

National Association of Housing Officials. Housing Officials' Yearbook 1936. Editor, Coleman Woodbury. Chicago, 1936. x + 244 pp. \$2.

The second issue of the *Housing Officials' Yearbook* contains a detailed account of the activities of Federal and other housing agencies, both official and unofficial. Certain technical problems are also examined. An important part of the volume relates to the English housing experience, giving a general picture of housing activities in 1934 and 1935, and, in particular, of subsidised housing since 1920.

—— Proceedings, Joint National Conference on Housing, Washington, October 1935. Chicago, 1935. IV + 101 pp. 35 cents.

This housing conference, the outcome of meetings held in Washington early in 1935, dealt principally with slum clearance. Reports were presented on the situation in New York and in Chicago. The Conference also discussed fundamental questions relating to the planning of new houses: location, site planning and types of dwelling units, acquisition of property, financing of low-rent housing and Government assistance in this sphere. The Conference decided to meet again in the autumn of 1936.

National Industrial Conference Board. American Agricultural Conditions and Remedies. Preliminary General Review. New York, 1936. vi + 57 pp. \$2.

National Safety Council. Essentials of a Community Safety Program. The Problem and the Remedies. Chicago. 31 pp., illustr.

Nowakowski, Dr. Brunon. Zasady wietrzenia i ogrzewania zakładów pracy. The Principles of Ventilation and Heating of Industrial Plants. Instytut spraw społecznych. Institute for Social Problems. Industrial Accidents and Hygiene Series No. 9. Warsaw, 1935. xvi + 180 pp.

This work is in two parts, dealing respectively with the physiological and the technical aspects of ventilation and heating. In the first, the author considers air in relation to respiration, giving special attention among the normal constituents of air to carbon dioxide and ozone on account of the part they play in ventilation. He next deals with the question of smells and odours, and fresh air, which he discusses in the light of recent experimental research on ionisation. A chapter is devoted to gases, fumes, dusts, and infection from humid air. After expounding the question of the caloric exchanges between the human body and the environment, he analyses the artificial climate of buildings (temperature, humidity, movement of the air, heat radiation), and deals with thermal comfort, the katathermometer, the psychrometer, etc. Finally he gives standards for light and heavy work under different conditions of temperature. In the second part, he first considers the control of air flow through buildings, of thermal conditions, and of purity of the air, and then deals with cubic air space, natural ventilation, mechanical ventilation, and different methods of air conditioning, heating, humidifying, etc. A summary in English is given at the end of the volume.

Oppenheimer, Josef. Organisation und Konzentration in der tschecoslowakischen Brauindustrie. Inaugural-Dissertation der Universität Basel. Prague, 1934. 68 pp. Mr. Oppenheimer presents in this pamphlet a historical and statistical study of the organisation of the Czechoslovak brewery industry. It contains no special information on labour questions in this industry in Bohemia, on which subject the author gives only one interesting particular: he points out a provision of the quota agreement in preparation, according to which one-third of the resources of the assistance fund that is to be created may be used for the assistance of workers who are thrown out of work as a result of the closing down of a brewery which is party to the agreement.

Osio, Dr. Arturo. Riorganizzazione del credito in Italia. Relazione alla 1ª riunione della Corporazione del Credito. 15 pp.

Passage, Henri du. Morale et capitalisme. Bibliothèque d'études catholiques et sociales. Paris, Ernest Flammarion, 1935. 248 pp. 12 frs.

This volume is in two distinct parts. In the first, the author, after having examined the notion of capitalist profit, expounds the nature of capital and its position in regard to production and the distribution of profits. In the second, he brings into prominence the exceptional mobility and extreme centralisation of money, which, in his opinion, are the characteristic features of modern capitalism. He then traces the history of capitalism, defines its essence, and examines its modern manifestations. In his conclusions, he suggests different remedies to combat the anarchy created by the abuses of the present capitalist system. The principal interest of this work lies in the author's faithful and detailed commentary on the principles set out in the encyclical Quadragesimo Anno. It is in the light of the doctrine contained in this papal document that the author expounds, defines, and criticises a large number of economic theories and notions of modern capitalism, and from the same source flows the central idea of the work, i.e. that the principle of capitalist profit has nothing in itself that is unacceptable, but that the capitalist system of the present day is thoroughly vitiated, and calls for urgent reform if it is to conform to moral requirements and avoid a fearful catastrophe.

Patenotre, Raymond. Vers le bien-être par la réforme de la monnaie et du crédit. Paris, 1936. 189 pp. 3 frs.

Pergolesi, Ferruccio. I dirigenti d'azienda nell'ordinamento sindacale. Padua, Cedam, 1935. 178 pp. 18 lire.

Pinkevitch, A. Science and Education in the U.S.S.R. The New Soviet Library, 12. London, Victor Gollancz, 1935. 176 pp.

This book supplements and brings up to date the information contained in a former book on the subject by the same author. The first chapter gives a general idea of the public educational system in the U.S.S.R., and explains, in particular, the causes and methods of "polytechnicisation". After describing pre-school

educational institutions, lower and intermediate vocational education, and the system of higher education, the author gives a detailed account of the organs for scientific research work in the U.S.S.R., particularly the research institutes, and their development in recent years. Finally, he deals with the political education of the masses and education among national minorities.

Pipkin, Charles W. Social Legislation in the South. Southern Policy Papers, No. 3. Chapel Hill, University of North Carolina Press, 1936. 42 pp.

The pamphlet deals with workmen's compensation, child labour, mothers' pensions, female labour, administration of labour laws, and the Social Security Act in the following southern States: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas.

Playtime in Russia. By Various Authors. Edited by Hubert Griffith. London, Methuen, 1935. vii + 249 pp.

Contains a series of articles written by visitors to the U.S.S.R. in 1934. The greater part of the work is devoted to theatrical performances. Special mention may be made of the note on the amateur theatre movement in the U.S.S.R. by Mr. Whitworth, President of the British Drama League. An important chapter deals with the development of games.

Ponthière, Maurice. Le bureau moteur. Fonction et organisation des bureaux. Paris, Delmas, 1935. 408 pp. 45 frs.

Most of the works hitherto published in French on office work are either technical descriptions or accounts of the practical application of method. Mr. Ponthière considers the question from a higher standpoint, without, however, losing sight of realities. He shows—and this is the reason for the title of his work—how the office provides the motive force in an undertaking as the brain does in a living organism. It is in the light of this fundamental idea, which gives his work a special depth and unity, that he examines the application of methods of rational organisation of office work, starting from the highest principles of general administration and the philosophy of work, and arriving at the smallest details of execution. It is thus a remarkably compact and full study, which should draw the attention of heads of undertakings to the fundamental problems of business management, and suggest solutions for numerous practical problems.

Pour l'étude du marxisme. Guide de lecture. Paris, Bureau d'éditions, 1936. 127 pp. 2.50 frs.

Rather, A. W. Planning under Capitalism. The Problem of Planning in Great Britain. London, P. S. King, 1935. 199 pp.

Renaud, Jean. La terre soviétique. Sovkhoz et kolkhoz. Preface by Marcel Cachin. Paris, Editions sociales internationales, 1936. 156 pp. 5 frs.

Resch, Dr. Josef. Die volkswirtschaftliche Bedeutung der Sozialversicherung. Schriftenreihe der Oesterreichischen Gesellschaft für Versicherungsfachwissen. Redigiert von Professor Franz Dörfel. Neue Folge, Heft 7. Berlin, Carl Heymann; Vienna, Oesterreichischer Wirtschaftsverlag, 1935. 28 pp.

In this short but important pamphlet, Dr. Resch, Austrian Minister of Social Administration, analyses the importance and influence of social insurance on the national economy. He examines the role of private insurance, its inadequacy to cover social risks, the characteristic features of non-contributory pensions and national insurance systems, the nature of social insurance, and some criticisms of social insurance. He discusses measures undertaken in Austria for the reform of the social insurance system, projects tending to substitute a super-tax on business profits for insurance contributions, the necessary limitation of benefits and of administrative costs, which are often over-estimated, and he concludes by saying that corporative organisation should not affect social insurance by dividing up the field of its application into small risk groups.

Rousse, Thomas A. Government Control of Cotton Production. The University of Texas Bulletin. No. 3538:8 October 1935. Texas, 1935. 311 pp. 35 cents.

Roy, N. K. Community School. An Agency for Rural Reconstruction. A New Experiment in Rural Education. Patna, B. and O. Co-operative Federation. 30 pp.

Rul, René. La nationalisation des assurances privées. Université de Lyon, Faculté de droit. Thèse. Paris, 1936. 203 pp.

This thesis starts with a documented study of the working of insurance companies in France, containing, in particular, a historical and critical account of the control exercised by the State over insurance societies, and a brief description of the three national funds (for accident insurance, old-age pensions, and widows' and orphans' insurance). After recalling the different schemes submitted to Parliament, the author analyses, in the second part, the national and international problems raised by the monopolisation of insurance; he considers that priority should be given to the State monopolies of insurance against industrial accidents, motorcar insurance, and fire insurance. The last part deals with nationalisation and socialisation of all branches of insurance. Mr. Rul shows how the economic and social role of insurance can and should be widened, so that insurance may bring the community the guarantees of security that are indispensable to it. He is thus led to consider the generalisation of social insurance in the form of a public service, on the lines of the conception put forward in the works of the Union of Socialist Technicians.

Sandoval, Dr. José Enrique de. La Conferencia del Trabajo de los Estados de América Miembros de la Organización Internacional del Trabajo, Santiago de Chile, Enero de 1936. Havana, 1936. 93 pp.

Schär, Arnold. Das Werk von Bernhard Collin-Bernoulli. Ein Beitrag zu den Anfängen der Basler Sozialpolitik. Pioniere und Theoretiker des Genossenschaftswesens, Band IV. Basle, Buchdruckerei-Verband Schweiz. Konsumvereine, 1935. 208 pp., illustr.

The Swiss Union of Distributive Co-operative Societies has published, under the direction of Mr. Schär, the more important articles by Bernard Collin-Bernoulli, who lived from 1824 to 1899, and was not only the founder of the big Basle co-operative society but also a thinker interested in the different aspects of social questions. These articles on co-operative problems, the contemporary labour movement, and the relations between capital and labour, form therefore a contribution to the history of social thought in the nineteenth century.

Schütt, Hans. Das Recht der Angestellten. Berlin, Der Betriebswirt, 1935. v1 + 64 pp.

The author first recalls the legal provisions on which rests the contract of employment of different categories of salaried employees in Germany, and gives prominence to the provisions of the National Labour Act. The principal chapters of the work contain a study of the general labour problems of salaried employees, and deal in particular with wages, hours of work, holidays with pay, the termination of the contract of employment (including notice and compensation for dismissal), the law relating to apprentices, the legal protection of salaried employees, etc.

Scott, F. R., and Cassidy, H. M. Labour Conditions in the Men's Clothing Industry. Institute of Pacific Relations, International Research Series. Toronto, Thomas Nelson, 1935. $x+106~\rm pp$.

This report forms part of the research programme on standards of living in Canada which is being carried out under the auspices of the Institute of Pacific Relations. It was prepared at the request of the Canadian Garment Manufacturers' Association and the Amalgamated Clothing Workers' Union of America. Both the manufacturers and the workers have suffered greatly in recent years, the former from cut-throat competition and general economic instability, and the latter from unemployment, underemployment, and the revival of the sweatshop. It was felt by both groups that a full review of the facts was necessary, and the authors were

therefore entrusted as independent investigators with the task of analysing the labour and economic conditions in the industry and of working out a programme of control. They advocate progressive social legislation and the setting up of a Board of Control for the men's clothing industry in Canada, consisting of representatives of employers, labour, and consumers.

Siebert, Wolfgang. Das Arbeitsverhältnis in der Ordnung der nationalen Arbeit. Der deutsche Staat der Gegenwart. Herausgeber: Dr. Carl Schmitt. Heft 18. Hamburg, Hanseatische Verlagsanstalt, 1935. 119 pp.

After analysing the legal nature of the individual relations between employers and workers under the new social legislation in force in Germany, the author expresses the opinion that these relations constitute an organic unit exclusively governed by the law of persons and not by the law of contracts. After tracing the history of the theories on the labour contract and defending his thesis against other German authors, he examines the practical effects of his conception and the problems raised by labour relations, their legal consequences, and their cessation.

Solari, Juan Antonio. Régimen legal de la proveedurias en defensa del trabajador norteno. Buenos Aires, 1935. 39 pp., illustr.

Steinbach, Dr. Friedrich. Die rechtliche Natur der Sozialversicherungsträger unter besonderer Berücksichtigung der Bestimmungen des gewerblichen Sozialversicherungsgesetzes (GSVG). Schriftenreihe der Oesterreichischen Gesellschaft für Versicherungsfachwissen. Redigiert von Professor Franz Dörffel. Neue Folge, Heft 12. Berlin, Carl Heymann; Vienna, Oesterreichischer Wirtschaftsverlag, 1935. 32 pp.

The author, who is Secretary to the National Union of Austrian Insurance Institutions, analyses from the legal standpoint the nature of these institutions. Starting from the principle that the application of social insurance belongs, in legal theory, to the sphere of administration, he calls social insurance institutions autonomous administrative organs, and examines the juridical inferences (legal status, participation of insured persons in the management, discretionary power of institutions, State control). After this theoretical exposition he analyses the recent codification of Austrian social insurance law (Act of 30 March 1935), which illustrates and confirms the theories he maintains.

Stöhr, Hermann. So half Amerika. Die Auslandshilfe der Vereinigten Staaten 1812-1930. Stettin, Oekumenischer Verlag, 1936. 327 pp. 5.60 marks.

Strachey, Philippa. Memorandum on the Position of English Women in Relation to that of English Men. London, London and National Society for Women's Service, 1935. 31 pp.

Szorowa, Irena. Pozycja przy pracy i sprzet do siedzenia. Industrial Posture and Seating. Instytut spraw społecznych. Institute for Social Problems. Industrial Accidents and Hygiene Series, No. 10. Warsaw, 1935. 71 pp., illustr.

Publication designed for the use of factory inspectors who have to deal with the protection of workers against fatigue. In addition to giving a summary of the foreign literature on the subject, the author also quotes a certain number of experiments and examples from Polish industry.

Tannenbaum, Frank. Whither Latin America? An Introduction to its Economic and Social Problems. New York, Thomas Y. Crowell, 1934. xix + 185 pp.

The 1936 Chart Book. "Chicago Tribune" Charts about Consumers, the Stock Market, Business and Government. Prepared under the direction of R. D. Cahn. Chicago, 1936. 128 pp. 50 cents.

Tayler, William Lonsdale. Federal States and Labour Treaties. Relations of Federal States to the International Labour Organisation. (A Study of the Origin and Application of Art. 19. Par. 9, of its Constitution.) Foreword by Samuel McCune LINDSAY, Ph.D., LL.D. New York, 1935. 171 pp.

Tead, Ordway. Creative Management. The Relation of Aims to Administration. New York, Association Press, 1935. 59 pp. 50 cents.

This is one of the rare, and therefore all the more valuable, contributions of modern literature to the problems of organisation theory, management philosophy, and leadership. Grown out of the experiences of executive work in the fields of hospital management and district nursing, and with Christian associations, the book presents the more subtle aspects of the administrative problems of social agencies and institutions. The ideas expounded are both original and stimulating.

The New Survey of London Life and Labour. Vol. IX. Life and Leisure. London, P. S. King, 1935. xiv + 445 pp.

This volume of the Survey contains an abundant documentation on the utilisation of Londoners' leisure. In the introduction, Sir Llewellyn Smith, Director of the Survey, gives a history of the changes that have taken place in the margin of leisure and in the amusements and recreations of London workers since Charles Booth's day. This introduction contains a summary of the subsequent chapters, which deal with the pursuits of leisure, social organisations playing a part in this sphere, and certain negative aspects of the use of leisure (drink, gambling, crime, sex-delinquency). The last section of the work contains a number of descriptions of the life of working-class families by breadwinners or housewives.

Training for the Public Service. The Report and Recommendations of a Conference sponsored by Public Administration Clearing House. Edited by Morris B. LAMBIE. Chicago, Public Administration Service, 1935. 49 pp. 50 cents.

Transvaal Chamber of Mines. Proceedings at the Annual General Meeting held in Johannesburg, 30 March 1936. 20 pp.

Trevisán, Dr. Egidio C. Régimen Económico de la Tierra en la República Argentina. Conferencia pronunciada en "La Razón" el 26 de Septiembre de 1935 con el auspicio de la Cámara Argentina de Colonización. Buenos Aires, 1935. 18 pp.

Ufficio centrale dell'azione cattolica italiana. La moralità professionale. Settimane sociali d'Italia, XVIII sessione, 1934, Padova. Milan, Vita e Pensiero, 1935. v1 + 398 pp. 15 lire.

Uhrbrock, Richard Stephen. A Psychologist looks at Wage Incentive Methods. Presented at The Institute of Management Meeting, 21 May 1935. New York, American Management Association, 1935. 32 pp.

In view of the great opposition which wage incentive methods in general and the stop watch in particular have met with from the workers' side, this study by a psychologist is of great interest. According to the author, "scientific management" is scientific only to the extent that its results are based upon objective, verifiable, accurate, and reliable data. It is unscientific to the extent that judgment and opinion enter into the calculations. In so far as wage incentive methods deal with measurements made by accurate instruments in the hands of competent persons, the work of the wage incentive engineer may be called scientific. However, when the unchecked opinion of one observer enters into the calculation, the procedure becomes open to attack.

Union centrale des associations patronales suisses. Rapport du Comité central sur l'activité de l'Union durant l'année 1935. Lausanne, 1936. 80 pp.

Union of Counties Associations for the Blind. Standing Committee. Report on the Prevention of Blindness. London, Prevention of Blindness Committee, 1936. VIII + 150 pp. 2s. 6d.

University of Cambridge. Department of Agriculture. Farm Economics Branch. Changes in the Economic Organisation of Agriculture. A comparative study of conditions in the Eastern Counties of England in 1933 and 1935. Report No. 23. Cambridge, 1936. IV + 36 pp. 1s. 6d.

Van Goethem, Fernand. Beginselen van Sociale Wetgeving. Moreele, Sociale en Juridische Studien. Brussels, F. Larcier, 1936. 410 pp.

In his summary of Belgian social legislation, the author considers social insurance and social assistance, labour protection, occupational associations and the different forms of the contract of employment recognised in Belgian law. Two appendices give indications on the organisation of social administration and on the principles of international labour law as seen from the Belgian standpoint.

Vecchio, Giorgio del. Staat und Staatengesellschaft. Sonderabdruck aus Internationale Zeitschrift für Theorie des Rechts, Jahr X – 1936, Heft 1. Brünn, Prague, Leipzig, Vienna, M. Rohrer, 1936. 13 pp.

Vellianiti, Spyridonos A. Ai Asfaliseis ton ergaton kai ypallilon. Athens, 1935. 39 pp., tables.

The author, who is chief of section in the Greek Ministry of National Economy, makes an examination, based on comparative statistical data, of the organisation of social insurance in Greece, its development and present position.

Verband der deutschen gewerblichen Berufsgenossenschaften. 50 Jahre Unfall, versicherung. Eine Denkschrift der deutschen Berufsgenossenschaften. Berlin, 1935. 127 pp., diagrams.

The German Union of Industrial Accident Insurance Occupational Corporations gives a retrospective account of its activities during the first fifty years of its existence (1885-1935). It recalls the aim, institution and development of industrial accident insurance, which is so important for the welfare of the German wage-earning population. The work contains statistics showing for each year the number of undertakings and of workers insured, the amount of wages, the number of insurance institutions, and the number of compensated accidents.

Versell, Herman. Konjunkturgestaltung, Gesetzmässigkeiten in Konjunktur und Krise. Wallisellen-Zurich, 1936. 76 pp. 2 frs.

Applying the theory of constants to the economic cycle, the author has constructed an ellipse which he considers portrays schematically the course of the economic process, and enables depressions to be foreseen, and therefore prevented, by adapting the economic behaviour of society to the tendencies foretold by a study of the ellipse.

Visme Williamson, René de. The Politics of Planning in the Oil Industry under the Code. New York, London, Harper, 1936. 80 pp. \$2.25.

Wang Ching-Wei. Problèmes chinois et leurs solutions. Traduit de l'anglais par J. E. Lemière et précédé d'une esquisse biographique de l'auteur par T'ang Leang-Li. Shanghai, China United Press, 1935. 237 pp.

Warburg, James P. The Money Muddle. New York, Alfred A. Knopf, 1934. 272 + x pp. \$2.

Watson, Frank. Housing Problems and Possibilities in the United States. New York, London. Harper, 1935. III + 100 pp., tables, diagrams.

Webb, Sydney and Beatrice. Soviet Communism: A New Civilisation? Vol. I. XIX + 528 pp. Vol. II. Pp. 529-1174 + x pp. London, New York, Toronto, Bombay, Calcutta, Madras, Longmans Green, 1935.

In the preface to this work the authors state that their aim has been to present an objective view of the whole social order of the U.S.S.R. and to show "the direction in which it is travelling". In accordance with this general plan, they devote the first volume to the Soviet constitution and the second to "social trends in Soviet Communism". Their study of the Soviet constitution provides the authors with an occasion for a close examination of the numerous forms of administrative, economic and political organisation. First comes an analysis of the constitutional system itself, followed by two chapters dealing respectively with associations—

trade unions and associations of owner-producers, the collective farm—and with co-operative organisations. The following chapter describes the structure and activities of the Communist Party and its role in the Soviet Union. In the last part of the volume, entitled "Dictatorship or Democracy", the authors attempt to define the form of the Soviet State. They consider that in the U.S.S.R. the widespread personal participation of the adult population in government through a multitude of channels (soviets, trade unions, co-operative societies and voluntary associations) "justifies the designation of it as a multiform democracy."

The second volume deals with the social trends of the system. It begins with a review of the events leading to the disappearance of the landlord and the capitalist. The authors then examine the different aspects of the social, ideological and ethical outlook of the Union. This part of the work includes a well-documented chapter on planned production, another on the role of profit in the economic life of the country, the wage policy, and the multiple factors that determine the attitude of the Soviet workers to work; finally, in a chapter entitled "The Remaking of Man", which describes in particular the measures instituted in the sphere of assistance, social welfare, education, housing, etc., Sydney and Beatrice Webb deal with the place of science in Soviet Russia, the different psychological factors, and the philosophical principles obtained that make towards an improvement of living The elimination of the profit factor, the organisation of economy according to a definite plan, social equality, the new multiform system of political representation, the role of the governing party, the cult of science and "anti-Godism", the birth of a new communist conscience, are, in the authors' view, some of the principal characteristic signs of the new civilisation that the Soviet Union is creating.

By its scope, the wealth of the sources utilised and the lucidity of the exposition, this book ranks among the most important works that may be consulted on social conditions in the Soviet Union.

Wenzel, Dr. Karl. Arbeiterurlaub. Vienna, Zeitschrift der Gehilfenvertreter. 47 pp.

Witte, Edwin E. An Historical Account of Unemployment Insurance in the Social Security Act. Reprinted from the symposium on "Unemployment Compensation" published in Law and Contemporary Problems, Duke University, Durham, N.C. Pp. 157-169.

— The Essentials of Unemployment Compensation. Reprinted from the National Municipal Review (U.S.A.), Vol. XXV, No. 3, March 1936. 7 pp.

Wolf, Karl. Die Landhilfe. Dresden, M. Dittert, 1935. 79 pp.

Wood, R. McKinnon. Aircraft Manufacture. A Description of the Industry and Proposals for its Socialisation. London, Victor Gollancz and the New Fabian Research Bureau, 1935. 26 pp. 6d.

Workers' Educational Association. Workers' Educational Trade Union Committee. Report of the Second I.L.O. (Geneva) Summer School for British Trade Unionists, arranged through the joint co-operation of the International Labour Office, the Workers' Educational Association and the Workers' Educational Trade Union Committee, 3-10 August 1935. London. 48 pp. 3d.

Forty-two participants, of whom ten were women, attended the second Summer School for Trade Unionists at Geneva (3-10 August 1935). This pamphlet contains information on the organisation and programme, and summaries of the lectures given by different speakers, most of whom were officials of the International Labour Office. The fourth part summarises discussions on labour problems in the East, economic recovery in western countries, and the protection of labour standards.

Wyznikiewicz, Zdzislaw, and Rzewski, Aleksy. Systematyczny przeglad ubezpieczen społecznych w Polsce. Lodz, 1936. 178 pp.

The authors have the indisputable distinction of having written the first systematic work on social insurance in Poland. In this analytical work they first consider