



New Statistics of Collective Agreements in Germany

by

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Statistics of collective agreements in Germany have for many years been compiled both by the Statistical Office of the Reich and by the trade unions. Since the war, however, the growing importance and complexity of the system of collective agreements has rendered the old statistical methods incapable of dealing satisfactorily with the material, and the trade unions in particular have been obliged to work out new methods suited to the present conditions, and designed to meet their own need to know exactly what the situation is at any moment and how it is changing. An elaborate and highly centralised statistical system, based on a simple record card filled in by each union on the conclusion or termination of an agreement, has recently been put into operation by the General Federation of German Trade Unions, and adopted with some modification by other important federations. In the following article Mr. Woytinsky, who has been closely connected with the scheme from its inception, gives a full account of the new methods and their underlying principles, and summarises the results of the first general survey of collective agreements carried out by the General Federation at the end of 1929. Special attention is drawn to the relation of the scheme to the resolution adopted by the Third International Conference of Labour Statisticians on the compilation of statistics of collective agreements, and to the progress it represents towards overcoming the well-known difficulties presented by these statistics.

I.

AMONG the subjects discussed at the Third International Conference of Labour Statisticians, convened by the International Labour Office in Geneva in October 1926, was that of international statistics of collective agreements.¹ While in the

¹ INTERNATIONAL LABOUR OFFICE : *The Third International Conference of Labour Statisticians*. Studies and Reports, Series N, No. 12. Geneva, 1926. Cf. also the report of the Conference in *International Labour Review*, Vol. XV, No. 1, Jan. 1927, especially pp. 7-10 and 19-21.

end the Conference unanimously adopted a resolution on statistics of collective agreements, containing proposals for more uniform methods of classification and compilation, it was argued during the discussion that collective agreements were not a suitable subject for statistical treatment, as it was difficult to ascertain the number of workers affected, this number might differ for different clauses of a single agreement, and the wide divergence between agreements regulating general conditions of employment in detail and those dealing with individual points of secondary importance made it impossible to treat them as in any way units of similar value for statistical purposes.

Any one who has tried to use statistics of collective agreements to obtain information on collective bargaining must admit that there is a large element of truth in the above considerations. Collective agreements considered as legal instruments can hardly be treated differently from other instruments: they can be collected, classified, registered, reproduced, and counted; but obviously none of this results in statistics of collective agreements. The real statistical unit in this case is not the agreement in itself, but the relation between the parties, which is often determined by a number of arrangements of varying content and form. The definition of the term, and therefore the statistical treatment to be applied, also differs from country to country. In Germany it is usual for a collective agreement to be printed jointly by the two parties in the form of a small booklet, which is handed to each worker on his engagement. Sometimes this booklet contains the text of only one agreement regulating all questions. More often, however, it contains two or more complementary agreements, frequently supplemented by decisions of a wages board or labour court. It is this collection of documents that governs conditions of employment in the undertaking or branch of industry concerned, and forms the collective agreement in the statistical sense.

The compilation of statistics of collective agreements is thus exposed to difficulties that do not arise in other branches of labour statistics. The statistical unit here is not defined by certain simple criteria, but has first to be constructed. But this is not all. The relation between the parties is an element in the social structure and is constantly changing with it, and the component parts change at different rates and in different ways. Wage conditions, for instance, are usually more mobile than the other provisions; certain more or less standard clauses remain

unchanged even when all the rest of the agreement is completely altered. There are two ways of revising an agreement. If a particular point is to be changed, the whole agreement may be terminated, and, after due negotiation, a new agreement concluded, incorporating all the clauses of the old one except on the point at issue, which is put in a new form. This procedure is customary in, for instance, Switzerland. In Germany, on the other hand, the tendency is to avoid terminating the whole agreement if it is proposed to amend it on only a single point. If, for instance, wage rates are to be revised, only the corresponding section of the agreement is terminated; the remaining conditions (hours of work, holidays, classification of areas and occupations, conciliation authorities, etc.) are left in force. In this way the collective agreement is broken up into its component parts, each of which acquires a legally independent form, although statistically they are only elements in the whole which is under investigation. There is much to be said for each of these methods, but in general the Swiss method seems to correspond to a comparatively simple economic structure, while the German one is justified by the complexity of the economic and social conditions of the country.

It will be clear, therefore, how difficult it is for statistics of collective agreements to deal with changes in the conditions regulated by the agreements, when these changes are like the motion of so many parallel streams moving at different rates. The risk is great of compiling tables that are apparently quite sound but on closer consideration are of no use in practice because they give a distorted picture of the facts. In this respect the doubts whether statistical treatment can properly be applied to collective agreements seem not altogether unjustified.

It is proposed here to give an account of some new work that has been done on statistics of collective agreements in Germany which, in the opinion of the present writer, may be of interest to readers of this *Review*, not only from the point of view of results, but also from that of the method adopted and its underlying principles.

II.

Statistics of collective agreements in Germany have been collected for some time by two bodies—public authorities and trade unions. When the Imperial Statistical Office ventured in 1903 to take the first step in this field by collecting these agreements,

it obtained the support of the trade unions, which had already made a regular collection for the occupations they covered. Since then there has been a close connection between the trade union and the official statistics of collective agreements. The statistical authorities request both parties to agreements to report to them on agreements concluded and agreements in force at the end of the year. In actual fact, however, they rely mainly on the reports of the trade unions. Before the war the Statistical Office kept a special record of how far each party supplied reports on the conclusion of collective agreements. This gave the following results ¹ :

Year	Number of new agreements reported :	
	By workers	By employers
1907	2,811	319
1908	2,252	343
1909	2,360	234
1910	4,866	547
1911	4,330	272

The official statistics are still based mainly on the reports of the trade unions, which not only fill up a separate form for each new agreement concluded, but in addition summarise their agreements at the end of the year for the Federal Statistical Office.² The unions also compile their own statistics of collective agreements and from time to time publish their collections of agreements, which are a fund of information on the whole system of collective bargaining, besides being in some respects extremely valuable from the point of view of method.³

The pre-eminence of the trade unions in this matter of reporting is a natural consequence of the nature of collective agreements and the position of the unions with regard to them.

In the first place, it should be emphasised that no statistical office would be able to interpret the agreements in force correctly without the help of the parties to them, or to give an accurate idea of the conditions prevailing in the occupation. The duties of the parties are not limited to making a formal

¹ *Reichsarbeitsblatt*, 1908 to 1911.

² As explained below, this system was modified in 1929.

³ Reference may be made to the *Tarifsammelwerk des Deutschen Metallarbeiterverbandes*, in fifteen volumes. The agreements in this collection are classified by branch of industry and town. Each agreement, with its supplementary agreements, is bound separately and may be replaced at any time, so that the collection is kept up to date. An equally important collection is that of the Textile Workers' Union, in two volumes, which shows for each agreement its relation to the whole system (whether it is a covering agreement (*Manteltarif*), or an agreement on wages or hours of work), its scope (number of undertakings and persons covered), and the method of conclusion. There are also comprehensive collections made by the unions of State and municipal workers, food workers, building workers, etc.

report on the number of undertakings and persons, etc. What is needed is rather a pronouncement on the actual meaning of the agreement and its component parts, and on its relative position in the system of agreements in force for the occupation concerned. Here an analysis of the text of the agreement is often insufficient. It is also necessary to know exactly what is not in the agreement, and that can be learnt only from the parties to it. Particularly in cases where several agreements (federal agreement, district agreement, local wage agreement) overlap, some of their clauses being the same, it is frequently impossible to determine by formal criteria which is the agreement proper and which are the supplementary agreements. In settling these and similar questions, there are as a rule no differences of opinion between the parties. There is therefore no risk that the statements of the parties on this aspect of their agreements will be tinged with their own views, as is difficult to avoid in reports on strikes and lockouts. Where statistics are concerned, the parties to the agreement have no special axe to grind, which would make their statements need strict examination. They are rather experts who are alone in a position to find their way in the chaos of agreements, of which some overlap and some amend each other.

But in the matter of collecting the agreements, the two parties are in a very different situation. On the workers' side collective bargaining is strongly centralised. On the employers' side, on the contrary, there are many individual undertakings and local employers' associations that are only loosely connected with the central organisations. The German official statistics of collective agreements for the beginning of 1928 show 6,501 agreements for workers and 1,677 for salaried employees, classified according to the nature of the contracting party on the employers' side as follows:

Contracting party on employers' side	Number of agreements	
	For workers	For employees
Individual firm	2,579	588
Guild	794	815
Employers' association	3,240	1,107

The number of independent contracting parties on the employers' side thus reaches several thousand. Most of them have concluded one or two collective agreements with the workers (which may, however, consist of several separate arrangements). Only the larger district and federal employers' associations are interested in several collective agreements at once.

The relation of the system to the workers is quite different. In Germany works agreements are not deemed to be collective agreements, and only trade unions are regarded as contracting parties on the workers' side. The unions are strongly concentrated, being combined in a very few central organisations. In 1929 the number of organisations with which the Federal Statistical Office had dealings was 94, several of which reported on many hundred collective agreements (the German Metal Workers' Union on 689 agreements, the Food Workers' Union on 1,316, the Transport Workers' Union on 814, the Tobacco Workers' Union on 685, the Central Union of Salaried Employees on 827, the Federation of Salaried Employees' Unions on 732, etc.). Since then the reports made by the unions have been still further centralised, and the reports of the "free" (Social-Democratic) trade unions are now sent in to their central organisation, the General Federation of German Trade Unions, which checks them, arranges them on uniform lines, and transmits them to the Federal Statistical Office.

It is true that several workers' unions participate in most of the important collective agreements, and that the agreements of unions of different tendencies overlap, a feature peculiar to the German labour movement. The whole system of collective agreements in Germany can therefore be covered only by a neutral official body like the Federal Statistical Office. Thanks to the trade unions, however, this Office has ready-made at its disposal a mechanism with wide ramifications that is in close contact with the system of collective bargaining.

It should not be forgotten that in countries where collective bargaining is highly developed, collective agreements form the focus of trade union activity. The unions regard it as their most important task to conclude as favourable agreements for their members as possible, and to see that the agreed conditions are fulfilled. The period when the workers disagreed on the compatibility of collective agreements with the principles of organisation has long since passed.¹ At present the trade unions are striving to extend collective bargaining as far as possible; the principle they now uphold is excellently expressed in the following statement by Mr. Clemens Nörpels, legal adviser to the General Federation of Trade Unions²:

¹ Cf. an article by the present writer: "Die Tarifverträge in Deutschland und ihre Statistische Erfassung", in *Arbeit*, July 1929.

² *Gewerkschafts-Zeitung*, 1928, No. 38, p. 597.

The collective agreement is the basis of collectivism. Without it the right to share in decisions in the undertaking loses much of its value, without it neither labour courts nor employment exchanges can carry out their duties. The conditions of employment of 11 million workers and salaried employees are governed by agreements. If the families of these 11 million workers and salaried employees are taken into account, it may be said that collective agreements affect more than half the German nation. The labour courts administer justice on the basis of these collective agreements; the employment exchanges may place workers only in accordance with the conditions of the agreements; the workers retain their claim to unemployment insurance benefit if they stop working because the conditions of the agreements are not fulfilled. One of the principal duties of the workers' representative bodies is to see that the provisions of collective agreements are carried out. There is therefore every reason to aim at the continued extension of the scope of these agreements and their protection against attacks.

In view of the importance of agreements in their work, the trade unions must keep a continual watch over all the agreements in force for the occupations they cover. It is obvious that the records they have made to meet their practical needs do not satisfy all the demands of strict method. On closer study, however, it will be found that some of the defects of their statistics can easily be remedied, and some are not defects at all. The principal defects of the work done here by the trade unions are, first, that as a rule each union collects and studies its agreements independently, on its own plan and by its own methods, and secondly, that their classification is based on the structure of the trade union movement, which does not always agree with the classification of industries.

The first defect can be overcome by an arrangement between the unions. As a matter of fact, the General Federation of Trade Unions has succeeded without much difficulty and in a short time in completely unifying the statistics of collective agreements of its affiliated unions, so that at present the same cards are used by all the unions for their card index of agreements, and about 10,000 collective agreements and wage agreements, covering over 10 million workers, are recorded by persons directly interested in them, on uniform lines in accordance with a scheme satisfying statistical requirements. This experience shows that the first defect can be remedied. The second, on the other hand, is unavoidable. Each union administers its own collective agreements, and general statistics of agreements are useful to it only so far as it can find in them figures applicable to the field it covers. At this point, however, an important

feature of the system of collective bargaining appears. The collective agreements of a country are much more closely related to the structure of the trade unions than to the classification of industries. If a single trade union covers several branches of industry, it is not unusual for agreements to be concluded that cannot be fitted into any classification of industries. For instance, in Germany there are collective agreements for the "metal industry" that cover smelting and refining, the manufacture of metal goods, engineering, the electrotechnical industry, and precision work, and that are incompatible with any classification of industries. If, on the contrary, a particular branch of industry is divided among several trade unions, there will be several sets of mutually independent agreements. In the German printing industry, for instance, there are three unions (Social-Democratic): for printers, lithographers, and printers' assistants; there are therefore also three sets of collective agreements. In a case of this kind, the agreements of industrially cognate unions may be collected in accordance with the classification of industries, but this procedure is not free from objection, as the set of agreements for any one union usually bears an individual stamp and is self-contained. But where a union concludes several agreements at once for different branches of industry, the statistician is helpless and his efforts to classify them fail. In the German official statistics, for instance, an attempt has been made to sort out the agreements of the Metal Workers' Union in accordance with the usual classification, with the result that at the beginning of 1928 it was found that the collective agreements for the manufacture of metal goods applied to 1,501,335 persons, those for engineering to 228,738 persons, and those for the electrotechnical industry and the manufacture of precision instruments to 89,522 persons. According to the census of occupations of 1925, however, the number of workers and employees engaged in the manufacture of metal goods was only 851,936, that in engineering, on the contrary, 1,277,771, and in the electrotechnical industry, etc., 319,199. The figures given by the statistics of collective agreements, when arranged according to the classification of industries, were thus contrary to the facts, because the principle of that classification does not agree with the structure of collective bargaining in the industry in question.

In such cases it is only from the unions themselves that the official statistics can get help, which must take the form of

sorting the agreements into smaller groups that are adapted to the classification of industries.¹

In the opinion of the present writer, all this shows that the key to useful and theoretically sound statistics of collective agreements is to be sought in the trade unions. From this standpoint, the new work done by the German trade unions is of special importance.

III.

In the autumn of 1929 the General Federation of German Trade Unions decided to standardise the records of collective agreements kept by its affiliated unions, and to use them as a basis for statistics of collective agreements covering all occupations. Soon after, the principles laid down by the General Federation were also accepted by the General Federation of (Free) Salaried Employees' Unions and—with certain important additions—by the General Federation of Christian Trade Unions. The need for these new statistics of collective agreements sprang from the development of collective bargaining in Germany and the problems it involved.

It is unnecessary to consider in detail here the growth of collective bargaining in Germany before the war and in the years immediately following the war.² A few figures, illustrated in the diagram below, will indicate the progress made in the last twenty-five years. In 1905, 1,577 collective agreements were recorded, covering between 400,000 and 500,000 workers in all. During the following years the numbers covered by agreements grew slowly but steadily, as shown by the following figures :

Period (end of year)	Workers covered	Period (end of year)	Workers covered
1907	974,564	1910	1,361,086
1908	1,026,435	1911	1,552,827
1909	1,107,478	1912	1,999,579

These figures are not, however, quite satisfactory, as some individuals are counted twice over in them, besides which the recording of agreements was at first incomplete. In 1912 double

¹ This kind of sorting is done by, for instance, the German General Factory Workers' Union, which includes workers in the chemical industry, the glass and china industry, the manufacture of paper, the sugar and jam industry, etc. The Agricultural Workers' Union, the Food and Drink Workers' Union, and some others sort their agreements in a way that facilitates their further classification by branches of industry in the central office.

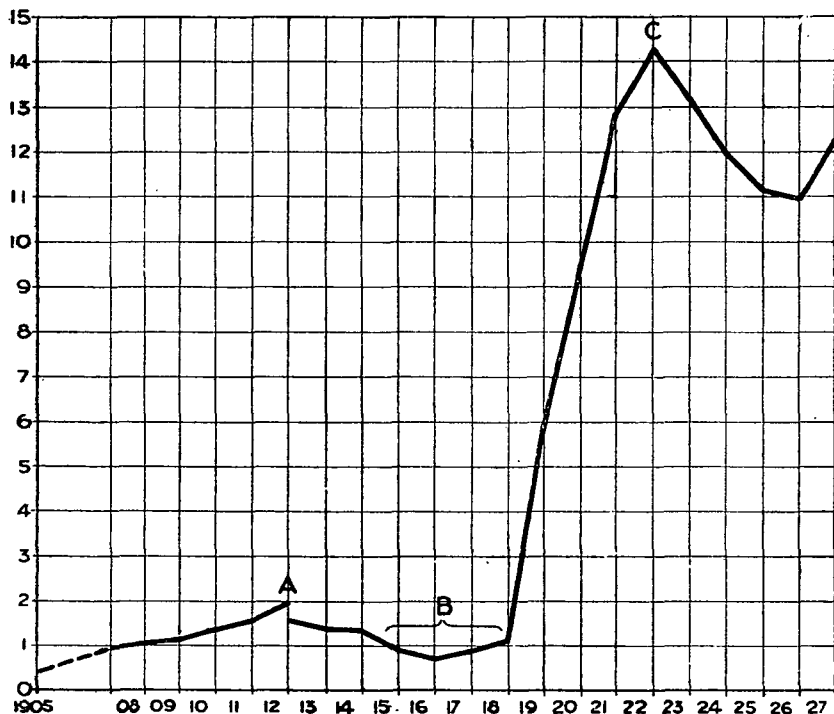
² Cf. *International Labour Review*, Vol. V, No. 4, April 1922 : "Collective Agreements in Germany" ; Vol. VI, No. 4, Oct. 1922 : "The Law of Collective Bargaining in Germany."

counting was eliminated by grouping overlapping agreements together. The official statistics compiled since that change may be briefly summarised as follows :

Period End of year	Agreements in force	Undertakings covered	Persons employed
1912	10,739	159,930	1 574,285
1913	10 885	143 088	1 398,597
1914	10 840	143 650	1 395 723
1915	10,171	121,697	943,442
1916	9,435	104 179	740 074
1917	8,854	91 313	905,670
1918	7,819	107 503	1 127,690
1919	11,109	272,251	5,986,475
1920	11,624	434,504	9,561,323
1921	11,488	697,476	12,882,874
1922	10,768	890,237	14,261,106
Beginning of year			
1924 ¹	8,790	812,671	13,135,384
1925	7,099	785,945	11,904,159
1926	7,533	788,755	11,140,521
1927	7,490	807,300	10,970,120
1928	8,178	912,006	12,267,440

¹ Effect of new legislation, which came into force in January 1923.

Million



NUMBER OF WORKERS AND EMPLOYEES COVERED BY COLLECTIVE AGREEMENTS IN GERMANY, 1905-1927

- A. Change in method of compilation, eliminating duplication due to double counting.
- B. Period of the war (1914-1918).
- C. Effect of new legislation.

The stagnation in the last years before the war was followed by a setback during the war, which after 1918 gave way to an extremely rapid rise. The steeply mounting figures in the first years after the war reflect the results of the new legislation and the altered national status of labour. Collective agreements became the normal method of regulating conditions of employment, and only in a few exceptional cases were there no agreements in force. At the end of 1922 there were in Germany not more than 17 or 18 million workers and employees for whom collective agreements could possibly be concluded, and about 80 per cent. of them were protected and bound by such agreements. Some agreements were indeed concluded without having behind them any strong organisation, that essential condition for the vitality of a collective agreement. This meant a sort of inflation or overproduction, due to transitory factors, that had inevitably to be followed by deflation.

At present the number of persons covered by collective agreements varies with the volume of employment; it rises in times of prosperity and falls in times of depression.¹ On an average, taking agriculture and all urban occupations together, about two-thirds of all workers and employees are directly subject to collective agreements. It is true that the conditions fixed in agreements have an influence on a wider circle of workers², but this vague "diffusion" cannot be measured statistically. There are still, indeed, branches of industry and occupations in which collective bargaining can make no headway—usually in undertakings where the staff is not organised and the owners belong to no employers' association. To these should be added undertakings where a legally valid collective agreement is replaced by a works agreement, and cases where for the time being, owing to the failure of negotiations, no agreement is in force. Collective bargaining in Germany has not yet reached its natural limit, but it is fairly near it, and it is hardly likely to make much progress in the next few years. Probably there will be some fluctuations in the number of workers covered by

¹ Cf. *Reichsarbeitsblatt*, 47. Sonderheft: "Die Tarifverträge im Deutschen Reich am 1. Januar 1928", p. 5*.

² In particular, if a collective agreement has become the standard in fixing labour conditions for the industry in question in the area covered by the agreement, the Federal Labour Office may declare it binding within that area for all contracts of work of the nature covered by the agreement.

collective agreements, but these will be small compared with the stable total of about 12 million persons.

In Germany, as in other countries, the original object of compiling statistics of collective agreements was primarily to measure the growth of collective bargaining. With the increasing adoption of the system, this work became less necessary and significant, taking second place after questions relating to the renewal of agreements and the method of their conclusion. Previously, it was sufficient to record the number of agreements at the beginning of the year, the number renewed or concluded during the year, and the number in force at the end of the year. Now, more details are wanted on the termination of old and the conclusion of new agreements: the party terminating the agreement, the course of the negotiations connected with the termination, and their results.

These new questions, which every country must ask sooner or later as collective bargaining advances, lead to a more detailed study of the component parts of the agreement, for these may be renewed and altered separately while the general scope of the agreement remains unchanged. As stated above, in Germany wage conditions are as a rule fixed separately from other conditions of employment. Before the war this separation was practically unknown; collective agreements were principally wage agreements, their main object being to stabilise wage rates. In the inflation period, however, the wage schedule was detached from the rest of the agreement, for the changes in it necessitated by the depreciation of the currency could not be regarded as a revision of the whole agreement. For some time the impression prevailed that after the currency was stabilised the old order would be restored. This has not taken place, however. Immediately after the stabilisation, German real wages were so low that there could be no question of concluding long-term wage agreements. It was necessary either to adopt the system of short-term agreements, which would lead to uncertainty in all the conditions of employment, or else to separate wages from the other conditions.

The second alternative was unhesitatingly chosen almost everywhere. Soon after, the well-known "rationalisation crisis" occurred, which meant that the workers had to declare their readiness to make heavy sacrifices in order that industry might reorganise and revive. The system of short-term wage agree-

ments with a covering agreement (*Manteltarif*) having a longer period of validity has been maintained. During the period of prosperity of 1928 and 1929, as well as during the subsequent depression, the expediency of dividing collective agreements into their component parts became fully evident. It was then observed that this new practice could also be justified theoretically. It is in fact clear that collective agreements are required not only to stabilise conditions of employment, but also to ensure their healthy development on lines of social progress corresponding to technical progress and the increasing productivity of labour. All conditions of employment must improve with time, but the rate at which they improve need not be the same; in particular, wages must be much more mobile and adaptable than other conditions of employment. It is not possible here to discuss other considerations involved in this train of thought. In brief, the existing system of separate covering and wage agreements is regarded by German labour not as a survival from the inflation period, but rather as a reasonable and efficient form of collective agreement, sprung from actual practice and having stood the test of actual practice.

This splitting up of the collective agreement into its component parts has involved new tasks for statisticians that could not be carried out with the old methods of compilation. Even in the first years after the war, when the first separate covering and wage agreements were concluded, it became clear that the recording of both at once would lead to duplication. At that time, however, the covering agreements were not very numerous (26 in 1919, 46 in 1920). They applied to the whole country and were so drafted that they could be treated as model agreements to be incorporated in local agreements. The Federal Statistical Office was therefore justified in not recording them separately but considering only the wage agreements connected with them.¹ A few years later, however, there was a complete change: inflation was at its height, and new wage agreements within the framework of the existing covering agreements were concluded every month and even every week, so that it became impossible to record them separately. The Federal Statistical Office thereupon decided to record the covering agreements as collective agreements proper, and to exclude wage agreements

¹ Cf. *International Labour Review*, Vol. V, No. 4, April 1922, pp. 576-577.

from the statistics as being merely supplementary to the covering agreements. In 1923 this was not only the best solution: it was the only one possible. But this procedure is still in force, although the pattern of the whole system of collective agreements in Germany has changed. This has produced an extraordinary situation. The trade unions pay most attention to wage agreements for their records; both the employers and the conciliation authorities are quite aware that the centre of gravity of the system of collective bargaining in Germany lies in wage agreements; the Federal Ministry of Labour keeps a card index of the more important wage agreements; at times the Institute for Economic Research is able to report on expiring wage agreements. But in spite of all this, wage agreements are not recognised in the official statistics. From being statistics of all collective agreements, these have become statistics of covering agreements, throwing light on only a part—and perhaps even not the most important part—of the field they set out to cover.¹ Hence they have become useless to the trade associations. There was nothing left for these to do but to extend their own statistics. They considered it particularly important to throw light on the working of the machinery for the conclusion of collective agreements and especially on the activities of the conciliation authorities, both those set up by the agreements and the official authorities—problems that elude investigation so long as the statistics are confined to covering agreements.

Before discussing the principles and the results of the new trade union statistics, we may sum up by stressing the fact that these statistics are the outcome not of political or theoretical considerations, but of the development of collective bargaining in Germany, a development that was naturally first realised by the bodies most closely concerned with it.

IV.

The statistics of collective agreements compiled by the General Federation of German Trade Unions are based on reports sent in by the unions as soon as an agreement is concluded or terminated.

¹ It should be pointed out here that in the Federal Ministry of Labour and the Federal Statistical Office work is already in progress for removing these defects. The prospective revision of the official statistics corresponds in the main to the ideas developed here.

Immediately after the conclusion of an agreement, the union must fill in a special card in duplicate, giving particulars of the contracting parties, the area and industries or occupations covered, the number of undertakings and persons covered, the nature of the subjects regulated, the duration and the method of conclusion of the new agreement, and some other formal details. One card is sent to the central office of the General Federation of Trade Unions (if possible with the original agreement), the other remains in the union's index. In the central office, these cards are collected in a card index, which thus contains all the material in the card indexes of all the affiliated unions. The central card index is adapted to the classification of industries, but only so far as this is compatible with the lines of demarcation between the unions. The unions are grouped by branches of industry, and where possible sorted into smaller groups, but on the whole the central card index follows the lines of demarcation of the unions. From the scientific standpoint this is perhaps a defect, but it is a defect that keeps the trade union statistics close to the reality, which would hardly be possible with a scientifically perfect method of classification.

In cases where two or more unions affiliated to the Federation are concerned in the conclusion of an agreement, they must all make a report. The cards for these "joint agreements" are not combined, but each union states on its card whether it has taken the lead in concluding the agreements, or has merely participated. Duplication is avoided by each union's reporting only on the number of persons in its own sphere of organisation. In adding up the data of all the unions, it is therefore sufficient to leave the participating unions out of account in order to find the total number of agreements in force and undertakings covered.

When notice is given to terminate a collective agreement, the union concerned immediately sends a special report to the Federation. The card used for this purpose gives particulars of the contracting parties (indicating which of them gave the notice), the number of undertakings and persons covered, the nature of the provisions terminated, and the reference number, duration, and dates of the agreement in question. This report must be followed by one on the conclusion of a new (or the prolongation of the old) agreement. If no such report is received, this indicates that the negotiations have failed and that no agreement is in force for the occupation, but this must always be confirmed by the union.

The system makes it possible at any time to survey the agreements in force, their termination, their renewal, etc. Once the system of making reports is properly established, the completeness of the records of collective agreements will be determined by the contents of the card used for reporting the conclusion of an agreement. But the particulars given on this card are very meagre; they relate only to the form of the agreement and give no information as to its substance. This is no accident. The new statistics, which are based on voluntary reporting by the unions, could not begin with a form that the over-worked and statistically untrained staff of the unions would find too difficult to fill in. The only possible course was to make it as short as possible at first, and extend it later on in agreement with the unions. Three stages for this extension were contemplated in advance. The first card was to standardise the records of the unions, accustom the unions to make regular reports to the central office, and provide an inventory of and an insight into existing conditions, thus creating the necessary groundwork for later and more detailed enquiries. Next, the card was to be extended by questions on hours of work and overtime, holidays, conciliation authorities, etc., all of which were included in the old records of the official statistics. For the third stage, it is proposed to have a card giving information also on wage conditions.

The first of these stages has now been reached: the first inventory has been concluded and the results have been published.¹ It will probably not be long before the next step is taken. In the opinion of the present writer, the material already obtained can be used to throw light on certain questions of method that were discussed at the Third Conference of Labour Statisticians and dealt with in the resolution they adopted. They will be briefly considered below from this standpoint.

V.

At the end of 1929 the number of collective agreements reported by the affiliated unions to the General Federation of Trade Unions for its card index was about 10,600. There were about 800 cases of unions "participating" in a collective agree-

¹ *Die Tarifverträge in Deutschland Ende 1929. Ergebnisse der Tarifstatistik des Allgemeinen Deutschen Gewerkschaftsbundes. Bearbeitet von Wladimir WOYTINSKY. 1. Sonderheft der Gewerkschafts-Zeitung. Berlin, 1930. 67 pp.*

ment of another union. Eliminating these, there remain about 9,800 collective agreements regulating conditions of employment in the Federation's sphere of action. To some extent, however, two and sometimes even three agreements relate to the same undertakings and workers. For this and other similar reasons, the first step towards working up the data on the cards had to be an examination of the individual agreements. The decision of the Third Conference of Labour Statisticians on this point was as follows :

The agreements should be classified in the following two principal groups :

- (a) agreements regulating individual conditions of employment only ;
- (b) agreements regulating — in addition to individual conditions of employment — general matters relative to employment.

This classification, although it closely corresponds to the principles of German labour law, could not be carried out in practice, as it would have yielded only very few agreements in group (a), leaving in group (b) all kinds of overlapping agreements. Another classification had to be found, based on easily recognised criteria and forming groups which should be free from duplication without further treatment. These demands appeared to be met by the following classification, which was adopted after thorough sifting of the material obtained.

A distinction is made between three kinds of questions dealt with by collective agreements : general questions, usually dealt with in covering agreements (C) ; hours of work questions, which are sometimes dealt with in covering agreements or in connection with wage conditions, but may also form the subject of separate agreements (H) ; and wage questions, dealt with in wage agreements (W), for present purposes not including "piece-rate schedules" (*Akkordtarife*). The various combinations of these questions yield seven types of agreement :

1. Full agreements regulating all questions (F, or C+H+W) ;
2. Covering agreements not regulating hours of work (C) ;
3. Covering agreements regulating hours of work (C+H) ;
4. Hours of work agreements (H) ;
5. Wages and hours agreements (W+H) ;
6. Wage agreements supplementing a covering agreement (W) ;

7. Wage agreements not connected with a covering agreement (independent wage agreements, or IW).

The table on page 524 summarises the distribution of these types of agreement in the different branches of industry and occupations. Full agreements predominate in agriculture and in certain occupations closely allied to handicrafts (lithographers, hatters, slaters, musicians, hairdressers), and are also very usual in the field covered by the so-called "General Unions" (public works). In other branches of industry, agreements dealing with particular points predominate. Among covering agreements, agreements that regulate hours of work are much more usual than those that do not. The number of the latter is strikingly small (137), but most of them cover a large number of workers: a covering agreement not regulating hours of work applies on the average to 17,400 workers, while the corresponding figure for covering agreements regulating hours of work is 1,800. Covering agreements not regulating hours of work are found mainly in agriculture, the textile industry, the metal industry, and for the Federal Railways. Separate hours of work agreements are comparatively rare, the most important being those for the Federal Railways and in the textile industry. The regulation of hours of work in connection with wage conditions (W+H agreements) is found on a fairly large scale only in agriculture and the metal industry, and to some extent in mining. Independent wage agreements seem to be rather infrequent, but it should be remembered that the General Federation of Trade Unions could not secure records of all of them.

The great defect of this classification according to the unions concerned and the nature of the agreement is that it is much too complicated to be useful. But it can be considerably simplified. The C and the C+H agreements may be combined in one group, and so may the W, W+H and IW agreements. The pure hours of work agreements, which are worth mentioning in only a few branches of industry, may be left out of account altogether. This produces the following simple classification: full agreements, covering agreements, wage agreements. It is on this classification that the new statistics of the General Federation of Trade Unions (and also of the Federation of Salaried Employees' Unions and the Christian unions) are based. As it provides the key to a trustworthy survey of

**COLLECTIVE AGREEMENTS IN FORCE AT THE END OF 1929 AS REPORTED BY THE UNIONS AFFILIATED TO THE GENERAL FEDERATION
OF TRADE UNIONS**

Union	Full agreements (F)		Covering agreements				Hours of work agreements (H)		Wage agreements supplementing covering agreements				Independent wage agree- ments (IW)	
			Not regulating hours of work (C)		Regulating hours of work (C + H)				Not regulating hours of work (W)		Regulating hours of work (W + H)			
	Num- ber	Workers covered	Num- ber	Workers covered	Num- ber	Workers covered	Num- ber	Workers covered	Number	Workers covered	Num- ber	Workers covered	Num- ber	Workers covered
Agricultural workers	156	1,122,984	3	510,670	12	210,908	—	—	19	226,869	26	480,524	5	667
Miners	46	102,318	11	195,283	14	450,363	5	136,957	18	585,973	6	58,671	1	350
Stone workers	8	2,440	—	—	22	97,007	—	—	222	106,747	—	—	10	1,491
Metal workers	147	245,065	47	423,372	539	1,211,213	27	124,241	610	1,250,585	15	301,500	3	367
Coppersmiths	16	907	—	—	17	2,557	—	—	18	2,667	—	—	2	61
Engineers and firemen	22	3,020	20	8,832	88	17,892	16	7,333	128	20,648	5	2,153	—	—
General factory workers	76	5,137	25	95,330	672	748,186	13	90,063	936	820,151	9	3,566	60	10,117
Textile workers	20	20,523	50	625,008	88	122,898	49	622,989	227	758,589	2	2,082	—	—
Printers	—	—	—	—	2	92,150	—	—	2	92,150	—	—	—	—
Lithographers	2	17,966	—	—	1	473	—	—	1	473	—	—	—	—
Printers' assistants	41	9,102	—	—	4	33,938	—	—	4	33,938	—	—	5	1,560
Bookbinders	11	618	—	—	33	98,024	—	—	34	103,834	—	—	13	1,329
Leather workers	11	1,298	—	—	42	40,989	—	—	32	39,820	—	—	—	—
Saddlers	49	2,005	—	—	76	36,896	—	—	84	36,847	—	—	1	240
Wood workers	46	6,780	9	5,815	308	321,628	6	2,259	263	307,758	4	3,398	42	6,842
Food workers	82	6,028	—	—	947	264,547	—	—	1,063	263,959	—	—	—	—
Tobacco workers	5	2,374	—	—	5	169,695	—	—	35	169,754	—	—	—	—
Clothing workers	8	10,887	15	116,163	37	62,985	11	99,807	51	162,528	1	15,070	5	13,029
Hatters	8	17,838	1	137	4	8,852	1	137	5	8,989	—	—	1	16
Shoemakers	30	9,056	—	—	1	95,000	—	—	8	98,459	—	—	10	500
Building workers	46	21,311	—	—	2	641,117	—	—	53	645,940	—	—	—	—
Carpenters	—	—	—	—	1	127,763	—	—	34	127,763	—	—	—	—
Slaters	3	16,739	—	—	—	—	—	—	—	—	—	—	—	—
Painters	9	1,384	3	341	57	105,398	—	—	48	104,247	2	205	—	—
General Union	518	244,070	10	9,019	354	630,473	7	2,306	416	576,093	5	7,373	—	—
Railwaymen	3	3,730	1	386,100	—	—	1	386,100	2	386,345	—	—	—	—
Hotel employees	47	35,136	—	—	79	149,464	—	—	77	129,343	1	200	3	320
Musicians	90	11,254	—	—	9	3,522	—	—	6	842	—	—	—	—
Hairdressers	50	30,975	—	—	—	—	—	—	—	—	—	—	—	—
Chimney sweeps	12	766	1	4,900	—	—	—	—	10	764	10	760	—	—
Total ¹	1,515	1,951,711	137	2,380,970	3,129	5,743,938	103	1,472,192	4,011	7,062,075	72	875,502	161	36,889

¹ Eliminating duplication due to cases in which several unions participate in a "joint agreement".

German collective agreements, it is perhaps allowable to reproduce here some explanations given in the introduction to the first issue of the new statistics¹:

It is difficult to draw definite lines between the three types of agreement, as a single agreement often extends to more than one field. A covering agreement may deal also with questions that properly speaking belong to the regulation of wages, while typical wage agreements often contain provisions that give greater precision to the terms of the corresponding covering agreement and deal with the technical details of their application. But this sort of thing is always likely to occur in statistics. Purity of type is often to be found only on paper, while in reality the criteria used to define the types occur in the most varied and sometimes unexpected combinations. In spite of these difficulties, it is always possible to decide what is the place of an agreement in the whole system of collective agreements for the occupation in question. . . .

A few observations may be made on the method of counting the three types of agreement.

The full agreements form a self-contained system. They overlap neither with each other nor with other agreements, and may therefore be summed without risk of duplication. The covering and wage agreements, on the contrary, complement each other. As a general rule, it may be taken that one or more wage agreements, applying to the same group of persons, correspond to one covering agreement. . . .

It quite often happens, however, that a federal covering agreement is supplemented by district agreements, which repeat some of the provisions of the federal agreement, give greater precision to others, and regulate all kinds of conditions of employment with which the federal agreement deals only in a general way. Judging by their contents, such district agreements should be described as full agreements. But since they apply to the same undertakings and persons as the federal agreement to which they are related, the result is that for the industry in question there are in force a covering agreement and, in addition, a series of full agreements. It also happens sometimes that the district agreements provided for in a federal covering agreement turn into a set of double agreements, a covering agreement and a special wage agreement being concluded for each district. In this case, there exist for the industry in question a federal covering agreement, a set of district covering agreements, and a set of district and local wage agreements. Finally, local covering agreements are sometimes concluded, under a district agreement, which is in turn based on a federal agreement.

To bring order into this confusion, the following plan had to be adopted:

For each group of workers only one covering agreement, one hours of work agreement, and one wages agreement are taken into account at any given moment. District agreements supplementing a federal

¹ *Die Tarifverträge in Deutschland Ende 1929*, pp. 8-9.

covering agreement (and also local or works agreements belonging to a district covering agreement) are regarded as wage agreements. District covering agreements, forming a link between district wage agreements and a federal covering agreement, are not counted separately. . . .

The full and the covering agreements together show the regulation by collective agreement of the conditions of employment that are dealt with by the covering agreements ; . . . the full and the wage agreements together show the regulation of wages.

With the simplified classification, the number of agreements in force at the end of 1929 in the sphere of action of the General Federation of Trade Unions was as follows :

Type of agreement	Agreements	Undertakings covered	Workers covered
Full agreements	1,515	198,278	1,951,711
Covering agreements	3,266	490,361	8,124,908
Wage agreements	4,244	428,935	7,974,466

The full agreements and the covering agreements of the Federation thus apply (eliminating duplication) to over 10,000,000 workers. These figures do not include the agreements for salaried employees, which in Germany are kept quite distinct from the workers' agreements and apply to between 1.6 and 1.8 million persons in all. The figures also exclude a few workers' agreements, usually of small scope, with which the Social-Democratic trade unions have nothing to do.

VI.

The further statistical work done on the collective agreements, classified as described above, is on the whole consonant with the principles of the Third International Conference of Labour Statisticians. On one point only, that of the nature of the contracting parties, was a deviation found inevitable. Here the principles adopted by the Conference recommend the following classification :

- (a) agreements concluded between an employer and his workers ;
- (b) agreements concluded between one or more employers, and one or more workers' organisations ;
- (c) agreements concluded between employers' organisations and workers' organisations.

In Germany, however, an agreement concluded between an employer and his workers is not deemed to be a collective agreement.¹ Thus the only possible distinction as regards the

¹ This was pointed out at the Conference itself by Mr. von Valta, the German representative (*The Third International Conference of Labour Statisticians*, p. 53).

contracting party on the employers' side is between agreements concluded by individual employers and those concluded by organisations. The results of this classification for the agreements in force at the end of 1929, and the percentage distribution between these two groups of the workers covered by each type of agreement, were as follows :

DISTRIBUTION OF AGREEMENTS BY NATURE OF CONTRACTING PARTY
ON THE EMPLOYERS' SIDE

Type of agreement	Agreements concluded by individual firms			Agreements concluded by employers' associations		
	Number	Workers covered		Number	Workers covered	
		Number	Per cent. ¹		Number	Per cent. ¹
Full agreements	797	297,614	15.2	718	1,654,097	84.8
Covering agreements	1,267	881,448	6.4	1,999	7,243,460	93.6
Wage agreements	1,625	942,682	7.3	2,619	7,031,784	92.7

¹ Excluding the covering and wage agreements for the Federal Railways.

There are also differences between the three types of agreement as regards the area and number of persons covered. On the whole, district agreements are the most important in Germany. This is especially so among full agreements; among covering agreements, in several branches of industry agreements covering the whole country compete with them for first place.

DISTRIBUTION OF AGREEMENTS BY GEOGRAPHICAL SCOPE

Geographical scope of agreements	Full agreements			Covering agreements			Wage agreements		
	Number	Workers covered		Number	Workers covered		Number	Workers covered	
		Number	Per cent.		Number	Per cent.		Number	Per cent.
Federal	9	116,709	6.0	60	2,908,390	35.8	33	1,133,897	14.2
District	347	1,489,247	76.3	544	3,826,346	47.1	976	5,226,110	65.5
Local	539	236,410	12.1	1,230	1,156,953	14.2	1,384	1,331,995	16.7
Works	620	109,345	5.6	1,432	233,219	2.9	1,851	282,464	3.6
Total	1,515	1,951,711	100.0	3,266	8,124,908	100.0	4,244	7,974,466	100.0

The average number of workers to an agreement is not a very conclusive figure, as it is strongly influenced by branch agreements, which are not all included in the returns. The distribution of the agreements of each type by their importance, as measured by the number of persons covered, seems to be more instructive. It may however be mentioned that for the agreements recorded in the central card index of the Federation the average was as follows: full agreements, 1,283; covering agreements, 2,486; wage agreements, 1,879.

DISTRIBUTION OF AGREEMENTS BY NUMBER OF WORKERS COVERED

Number of workers covered by each agreement	Agreements		Workers covered	
	Number	Per cent.	Number	Per cent.
Full agreements				
Up to 100	804	53.1	31,366	1.6
100-1,000	519	34.3	157,853	8.1
1,000-10,000	164	10.8	502,234	25.7
10,000-100,000	25	1.6	645,799	33.0
Over 100,000	3	0.2	619,559	31.6
Total	1,515	100.0	1,956,811	100.0
Covering agreements				
Up to 100	1,281	39.2	51,022	0.6
100-1,000	1,438	44.0	487,726	6.0
1,000-10,000	439	13.4	1,302,542	16.1
10,000-100,000	94	3.0	2,642,106	32.5
Over 100,000	14	0.4	3,636,412	44.8
Total	3,266	100.0	8,119,808	100.0
Wage agreements				
Up to 100	1,700	40.0	66,682	0.8
100-1,000	1,793	42.2	615,551	7.7
1,000-10,000	597	14.1	1,847,475	23.2
10,000-100,000	146	3.4	3,763,012	47.2
Over 100,000	8	0.3	1,681,746	21.1
Total	4,244	100.0	7,974,466	100.0

Wage agreements, however, not only cover smaller numbers, but are more changeable than covering agreements, while in this respect the full agreements occupy an intermediate position. This is clearly shown by the age of the agreements (the period between the date they came into operation and the date selected for the record). The average age of the agreements in force at

the end of 1929, weighted by the number of persons covered, was as follows : full agreements, 16 months ; covering agreements, 24 months ; wage agreements, 9 months.

The method of conclusion is discussed in great detail in the statistics of the General Federation of Trade Unions. The results of the enquiry for the end of 1929 show that in this respect methods of conciliation and arbitration and State intervention are incomparably more important than strikes and lockouts. The present state of the relations between employers and workers in Germany may be described as that of armed peace. Both sides are preparing for struggle and at times deliberately draw attention to their preparedness, but in spite of tension in social relations, strikes are rare. The percentage distribution of the workers covered, according to the circumstances in which the agreement was concluded, i.e. with or without a stoppage of work, was as follows :

Circumstances of conclusion	Full agreements	Covering agreements	Wage agreements
Without a stoppage of work	99.2	97.9	91.4
After a strike	0.7	1.6	4.4
After a lockout	0.1	0.5	4.2
Total	100.0	100.0	100.0

Out of the total of close on 10,000 agreements recorded, only 31 were concluded after a lockout, namely, 5 full agreements for 2,333 persons, 6 covering agreements for 44,715 persons, and 20 wage agreements for 331,926 persons.

In contrast to these comparatively low figures are the strikingly high figures for conciliation and arbitration. Here the statistics do not stop short at the simple criterion, "through the intervention of a third party", approved by the Third Conference of Labour Statisticians. On the contrary, an attempt is made to find out who the "third party" was in each case, and what form the intervention took. The results of this enquiry are impressive, even though they in fact only confirm what had long been known to all who had studied German social relations, namely, that direct negotiations still predominate in the conclusion of full and covering agreements, while for wage agreements conciliation or arbitration before a body set up by the agreement, or an official body, has come to be the normal procedure. The percentage distribution of the workers covered,

according to the procedure followed for the conclusion of the agreement, was as follows :

Procedure	Full agreements	Covering agreements	Wage agreements
Direct negotiations	61.8	61.6	27.6
Conciliation by an agreed body	4.3	4.6	20.5
Official conciliation	33.9	33.8	51.9
Total	100.0	100.0	100.0

The conciliation authority set up by the agreement intervenes almost automatically in the negotiations, so that it is impossible to determine at whose request the conciliation procedure was opened. For official conciliation, it is found that workers apply to the conciliation authorities more often than employers, although the latter sometimes consider consultation of these authorities to be the best way of settling a dispute.

DISTRIBUTION OF AGREEMENTS RESULTING FROM OFFICIAL
CONCILIATION, BY ORIGIN OF THE PROCEDURE

Origin of conciliation procedure	Full agreements			Covering agreements			Wage agreements		
	Number	Workers covered		Number	Workers covered		Number	Workers covered	
		Number	Per cent.		Number	Per cent.		Number	Per cent.
Workers' request	276	445,102	67.3	369	1,699,170	62.0	981	2,480,583	60.0
Employers' request	28	213,555	32.3	57	308,185	11.2	180	733,611	17.7
Request of both parties or official initiative	17	2,788	0.4	77	734,560	26.8	113	924,265	22.3
Total	321	661,445	100.0	503	2,741,915	100.0	1,274	4,138,459	100.0

Some of the cases brought before the conciliation authorities, whether official or set up by the agreement, are settled by agreement between the parties, but the more important disputes have as a rule to be settled by an arbitration award. The number of agreements resulting from arbitration awards was as follows :

Type of agreement	Number	Workers covered
Full agreements	191	565,471
Covering agreements	363	2,210,710
Wage agreements	1,067	4,853,992

In other words, for more than half the workers whose wage conditions are regulated by agreements, this is the result of an arbitration award.

In the smaller disputes, the award is usually accepted by both parties, but in the more important disputes the differences are as a rule too great for any award to bridge them. In such a case, the award given by the conciliation authority (which, under German law, is regarded merely as a recommendation to the parties) is often rejected by one or both of the parties.

DISTRIBUTION OF AGREEMENTS RESULTING FROM OFFICIAL ARBITRATION AWARDS, BY PARTIES ACCEPTING THE AWARDS

Parties accepting the award	Agreements		Workers covered	
	Number	Per cent.	Number	Per cent.
Full agreements				
Both parties	123	66.1	325,693	58.2
Workers only	57	30.7	179,399	32.1
Employers only	5	2.7	18,809	3.4
Neither party	1	0.5	35,200	6.3
Total	186	100.0	559,101	100.0
Covering agreements				
Both parties	216	62.8	768,861	39.7
Workers only	87	25.3	241,112	12.5
Employers only	37	10.7	660,918	34.2
Neither party	4	1.2	263,642	13.6
Total	344	100.0	1,934,533	100.0
Wage agreements				
Both parties	529	61.6	1,229,113	35.3
Workers only	198	23.0	993,983	28.5
Employers only	61	7.1	207,404	6.0
Neither party	71	8.3	1,053,327	30.2
Total	859	100.0	3,483,827	100.0

If one party rejects the award, and the other accepts it, the latter usually opens the procedure for having the award declared binding by requesting the competent authorities to issue an order giving the award the force of a collective agreement. The results of this procedure for the agreements in force at the end of 1929 were as follows :

Type of agreement	Awards declared binding		Awards accepted by agreement between the parties	
	Num- ber	Workers covered	Num- ber	Workers covered
Full agreements	65	229,053	18	4,355
Covering agreements	68	1,103,994	65	115,328
Wage agreements	181	2,003,600	152	298,713

These figures show the extent of the much-discussed "compulsory agreements" in Germany: about one worker in five is paid wages at a rate that is not the result of agreement, but has been fixed by the State.¹

* * *

The statistics quoted here are only a small sample extracted from the results of the recent enquiry made by the General Federation of Trade Unions. It was not possible to go into details, as the object was merely to show by a few examples how statistics of collective agreements may be compiled with the simplest material by the bodies most closely concerned in collective bargaining, and what problems arise in the process. It is hardly necessary to point out that the Federation's statistics in their new form are still in their infancy, and that only the first part of the task has been attacked. With their extension in the near future, the foundation will be laid for that unification of the more important branches of labour statistics, the need for which is hardly disputed by labour statisticians, and the pursuit of which presents official statistical authorities with innumerable and almost insurmountable difficulties.

¹ The field covered by collective agreements that have been declared generally binding—another, and no doubt salutary form of State regulation of wages—is even larger (see above, p. 516, footnote ²). But these are not "compulsory agreements" in the ordinary sense, as their contents are based on free agreement between the parties, or an award accepted by them, and the State authorities merely order their application to other undertakings as well.

For a description of the whole procedure, cf. *International Labour Review*, Vol. XII, No. 4, Oct. 1925: "The Compulsory Adjustment of Industrial Disputes in Germany", by Dr. Fritz SITZLER.