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Housing Problems and the Depression[1]

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The International Labour Conference, at its 1932 Session, adopted a resolution submitted by Mr. Nishio, Japanese workers' delegate, emphasising the importance of the question of workers' housing, and requesting the Governing Body to consider the possibility of placing the question on the agenda of an early Session of the Conference. Workers' housing is in fact a social problem to which no country can remain indifferent, however the form it takes may vary in each of them. But it goes further than this, and in some directions it perhaps calls for an international solution. The following article constitutes an initial survey of the question from this angle. It opens with a general review of the

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[1] *Principal sources:*

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situation in the various countries, so as to show the facts of the problem as it is to-day. Ten years ago the problem was essentially a matter of quantity; to-day definite importance is attached to quality. Yet in spite of the progress made, house building is still far from the stage of over-production, since to satisfy current needs and make up the large accumulated deficit of past years it is estimated that from ten to fifteen million dwellings would have to be constructed in Europe in the course of the next ten years. After reaching this estimate the author then briefly surveys various practical aspects of the problem—labour, technical and technological questions, finance—in their relation to the depression; he finally reaches the conclusion that the necessary action and the requisite financial and other resources are on such a vast scale that at many points they seem likely to overstep national boundaries.

IN JUNE 1924 the Sixth Session of the International Labour Conference at Geneva adopted a Recommendation concerning the utilisation of workers' spare time, in which special attention was paid to the question of housing conditions in connection with the promotion of social hygiene. The Conference considered that the best means of encouraging everything tending to the harmonious development of the worker's family life, and of protecting him from such dangers as the misuse of alcohol, tuberculosis, venereal disease, and gambling, was to place within his reach a proper home. It therefore recommended the increase in number, if necessary with the co-operation of the national or local authorities, of healthy dwellings at low rentals.

This question of housing the workers, which was already engaging the attention of those concerned with social questions in 1924, is doubly important to-day when the general problem of promoting a proper utilisation of the workers' spare time is more pressing than ever. Whatever fate the immediate future may have in store for the proposals relating to the 40-hour week, the tendency which they represent and which embodies the desires of a vast body of workers will inevitably remain—namely, the tendency to reduce hours of work in order that not only production but also the all-round development of the individual may reap the benefits of technical progress.

To-day, and still more than in 1924, it is evident that the home in or around which most of the worker's spare time is spent is a capital factor in the material and moral life of the individual.

It is essential, however, to distinguish clearly between the housing problem as it presented itself some ten years ago and the form it takes to-day.

The salient feature of the housing problem ten years ago was its quantitative aspect. At the present time, however, although the quantitative aspect of the problem is still by no means negligible, it is nevertheless the qualitative aspect that mainly requires analysis.

I.

As stated above, the housing problem some ten years ago, that is to say between 1920 and 1924, was above all a quantitative problem. This is in no way surprising, for even if it is admitted that housing conditions were reasonably satisfactory before the war—as was by no means the case—a mere glance at national statistics is enough to show that all house-building activity was practically at a standstill during the war and in most countries remained so for several years after. The reasons for this are manifold. There is, however, one important general reason which had already begun to make its influence felt at the beginning of the century, namely, that for speculative investors, who represent the extreme form of capitalism, capital investments in house property were not sufficiently remunerative.

Subsequent events confirmed, if they did not justify, this shyness of capital for building investments. During the war many countries had to resort to a rent moratorium in one form or another. For a long time social measures of various kinds kept rents in most countries at a level which was often inadequate even to keep the buildings in repair, let alone to yield interest on the capital invested. The charges on house property were thus considerably increased, and what had hitherto been looked upon as a safe investment underwent considerable depreciation.

In the face of this situation, which contained the germ of very serious difficulties, the Governments and local authorities felt themselves bound to intervene. To remedy the inertia of private enterprise, which was still unwilling to promote house building owing to the poor rate of interest it offered, the public authorities in a great many countries adopted far-reaching measures intended to encourage house building. These measures, which have achieved very definite results, are still far from having spent their force, but in view of the present economic and financial

difficulties it is impossible to foretell the extent of their success in the near future.

In any case, it is essential to obtain the clearest possible idea of what has already been accomplished in the sphere of housing, and notably in the building of working-class dwellings. It is not enough to take as examples the current conditions in certain big towns and to deduce therefrom that in house building, as elsewhere, there is over-production. As this article will endeavour to show, here more than in any other sphere there is a crisis of under-consumption—a fact which is in no way surprising if it is recalled that the estimates of housing requirements made immediately after the war revealed conditions that were nothing short of tragic.

In Great Britain, according to the most reliable estimates, there was a shortage of 500,000 dwellings in 1919. In France, apart from the problem of reconstructing the devastated areas, which involved the building of some 600,000 or 700,000 houses, the shortage of dwellings in Paris alone was estimated at some 50,000 in 1923. In Belgium, in addition to the current demand for 25,000 new dwellings a year, there was a shortage of 100,000 dwellings. Even in countries that had not suffered directly from the war, but with a high excess of births over deaths, like the Netherlands, there was a shortage of some 60,000 dwellings in 1922. In some countries the shortage almost baffled imagination. In Germany, for instance, the estimated figure for the lack of proper housing accommodation in 1921 was 1,500,000 dwellings, and the situation was equally serious in Austria and Poland. Still more remarkable is the fact that even the United States was not immune from the housing shortage, since there too building activity was suspended, at least during the the war.[1]

As stated above, the intervention of the public authorities in encouraging house building was attended by appreciable success. We must, however, not rest content with this optimistic general view of the situation, but try to measure the progress made since the end of the war, with a view to surveying the present position and estimating the part that can and should be played by housing in an economic revival.

In the first place, the different countries are seen to fall into distinct groups in regard to the present state of building activity.

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[1] For these estimates, cf. *European Housing Problems since the War*, p. 15 *et passim; Housing Policy in Europe*, p. 21 *et passim.*

A certain number seem to have been hardly affected by the depression from which building in general is suffering to-day. Such countries in Europe are the Netherlands, Denmark, Sweden, Norway, and, to a certain extent, Great Britain. The U.S.S.R. may be mentioned in passing only, since the position there is quite exceptional. In some other countries, including Switzerland, Czechoslovakia, Belgium, and perhaps also Poland and France, the situation appears to be stationary. Finally, there are others in which house building has very definitely slowed down, sometimes to the point of almost complete suspension. This is so in Finland, Italy, Germany, Austria, and, to take a typical example outside Europe, the United States.

The progress of building in these various countries will be considered below, and an attempt will be made to ascertain what consequent improvements have taken place down to the most recent times.

In the Netherlands house-building activity has remained more or less at the same level for a considerable number of years. Some 50,000 dwellings are completed each year, a maximum of 51,824 having been reached in 1930. It is generally admitted that this rate of building is not only adequate to meet current needs, in spite of a very rapidly growing population (there was an increase of between 100,000 and 110,000 a year from 1920 to 1930, with a total population of 7.9 million in 1930), but will ultimately enable the shortage piled up during the war to be made good.

In Denmark, there was no decline in house-building activity up to 1931. The number of new dwellings in the larger towns rose from 5,465 in 1921 to 13,623 in 1931. In the capital, in particular, over 8,500 dwellings were completed in 1931, as against 3,200 in 1914. On the whole there must have been a considerable improvement in the situation since 1920 ; the shortage was then estimated at 10,000 dwellings, and about 53,000 new dwellings have since been made available. If the 1914 building rate is taken as normal—an assumption obviously calling for many reservations—it is found that during the period 1920-1931, 35,000 dwellings would have been required to meet current needs and 10,000 more to make good the shortage. The total number of dwellings built between 1920 and 1931 should thus have restored the situation to normal. But there is no guarantee that these estimates are adequate ; and even if they are correct

they apply to the capital only. It is impossible to form a reasonably accurate opinion for the provincial towns.

In Sweden, building activity has progressed steadily since the war, and in 1923 the average number of new dwellings rose above the pre-war figure for the first time (an average of 6,205 in 1923 for 39 towns with a population of over 10,000, as against 6,155 in 1913). In 1930, 18,200 dwellings with 47,700 rooms were added to the existing supply, and in 1931 the same level was maintained, with 18,138 dwellings comprising 47,794 rooms. Although it is impossible to determine the exact results of post-war building activity in this country, it at least seems that housing conditions have been considerably improved.

In Norway, building activity has passed through several distinct stages. In the five principal towns the number of new dwellings built in 1913 was 1,627. The figure fell steadily from 1,397 in 1917 to 836 in 1920 ; it rose during subsequent years and fell again to 682 in 1927. In 1929 there was a revival both in the five principal towns and in the 26 localities covered by building statistics. In the latter group the net increase in dwellings rose from 1,391 in 1928 to 3,083 in 1931.

In Great Britain, it is difficult to trace any very marked tendency in building activity. The highest figures are those for 1927, when 238,914 dwellings were built in England and Wales and 22,175 in Scotland. There was an appreciable drop in the figures in 1928 ; they then rose in 1929, fell in 1930, and again recovered in 1931. The number of building permits issued follows a different curve. The total value of the plans submitted rose from £39 million in 1928 to £44 million in 1929, £46 million in 1930, and £40 million in 1931 for about 145 towns, not including London. Since the end of the war nearly 2 million dwellings in all have been added to the existing supply. It is hard to say whether this figure is sufficient to make good the shortage of 500,000 dwellings estimated to exist in 1919, as well as to cover current needs. In any case, the left-wing Parties are to-day still vigorously urging the continuation of State intervention in building.

Although it is difficult, if not impossible, to draw a definite line between the countries in which the progress of building is normal and those in which signs of flagging are apparent, it may nevertheless be assumed that in spite of certain apparently

contrary indications Switzerland may be included among the latter.

In Switzerland, as everywhere else, there was an appreciable decline in house-building activity between 1914 and 1922, and it was only in 1923 that a revival began which has continued ever since. According to the statistics of the Federal Department of National Economy, relating to 26 towns with a population of over 10,000 in 1920, the number of new dwellings built, which averaged 6,089 a year from 1910 to 1913 and had fallen to 909 in 1918, rose to 6,516 in 1927. Another set of figures, relating to 31 towns, shows that the number of new dwellings completed rose from 7,203 in 1927 to 12,681 in 1931. On the whole, building activity did not reach the average for 1910-1913 until 1927, but since then it has remained steadily, and indeed considerably, above this level. Is it therefore to be concluded that current needs are being adequately met ? Taking the yearly average for 1910-1913 as representing normal conditions, it is clear that for the 26 towns concerned 73,000 dwellings should have been provided between 1914 and 1925. As in fact only 30,000 were provided, this must have meant a deficit of 43,000. During subsequent years, a further 12,000 dwellings were added, so that, with every reserve as to the accuracy of these estimates, it may be stated that from 1914 to 1931 there was a deficit of 30,000 dwellings.[1] This may serve to give some indication of the position. From the fact that in a stable country like Switzerland building has enjoyed a prosperous period it does not follow that the situation there is absolutely normal. At the present time, it appears from the statistics of building permits that building activity is on the threshold of an appreciable decline. During the first half of 1932 only 2,582 building permits were issued in the 393 communes covered by the statistics, representing a decrease of 17.3 per cent. on the first half of 1931; the decrease in the corresponding number of dwellings to be built was 34.6 per cent. The decline was even greater in the 31 towns with a population of over 10,000, where there was a reduction of 40 per cent. in the number of dwellings for which building permits were issued. This situation in a country where capital is plentiful gives some hint of what may be expected in other less favoured

[1] This is a relative and not an absolute deficit, relating not to the total number of dwellings but to delay in replacing old ones.

countries when the building operations now in progress have been completed.

The position in Czechoslovakia since the war in regard to house building is somewhat peculiar. As this country is a new political unit, it has been necessary to create administrative centres, and notably a capital, from the very beginning, a process calling for additional housing accommodation. Unlike Vienna, for example, Prague has acted as a centre of attraction. Homes have had to be provided for the families of the new town dwellers, and building has thus received a considerable impetus. As a result of steady building activity, there has been a considerable increase in the number of dwellings in Czechoslovak towns, as the following table shows :

Population of towns	Number of dwellings In 1920	In 1930
Over 100,000	283,326	388,435
50,000 — 100,000	22,331	31,755
20,000 — 50,000	170,645	212,338
10,000 — 20,000	184,854	230,030
5,000 — 10,000	235,606	284,574
	896,762	1,147,132

Thus in ten years there was an increase of 28 per cent. in the number of dwellings available, while the corresponding urban population rose from 3,807,000 to 4,431,000, or by 19 per cent. Building activity reached its peak in 1928, when the number of newly-built dwellings in 76 towns rose to 36,349, as against 4,521 in 1921 ; since then it has remained below 30,000. The following figures give some idea of the course of building activity. In 1919 the number of new dwellings per 10,000 inhabitants was 7.6 ; in 1928 it was 122.4 ; in 1930 it fell to 75.7, since when it was risen slightly as a result of new legislation on building. It is doubtful, however, how long this fresh revival will last.

In Belgium, not only had the current needs of a rapidly growing population to be met, but the loss of the large number of buildings destroyed during the war also had to be made good. Owing to the difficulty of financing building by private capital, a vast building scheme was set on foot through the medium of the National Society for Cheap Dwellings, which, taking one year with another, has provided some 50,000 dwellings since 1924. According to the *Bulletin* of the National Bank of Belgium, the number of building permits issued, which was

13,067 in 1929, fell to 11,400 in 1930, the subsequent figures being 12,170 for 1931 and 5,380 for the first half of 1932. It does not appear, therefore, that house building is on the upward grade in Belgium, but rather the reverse.

In France, a study of the normal course of building activity is complicated by the factor of the reconstruction of war-devastated areas. While the number of houses registered for taxation purposes was 9,518,000 in 1914, it had fallen to 8,525,000 in 1918, and it cannot confidently be asserted that the situation has been restored to the 1914 level even to-day. It was not until 1929 that the 1912 figure was again reached, a fact which may easily be understood since between 1916 and 1929 (a period over which comparable statistics are available) 980,000 houses appeared under the heading " loss of taxable property " and some 790,000 under that of " increase in taxable property ". It would be useless to take into account data for the years before 1927, since these are affected by the reconstruction of devastated areas. But from 1927 onwards house-building activity in 87 departments was as follows :

Year	Houses built	Houses demolished	Net increase
1927	70,922	27,174	43,748
1928	75,672	35,056	40,616
1929	64,103	33,409	30,634

Building activity thus seems to be decreasing. There are no absolute figures for subsequent years, but the indexes of production show that building in general (industrial building and house building) reached its peak in 1930, when the index of building activity was 137 (1913=100); it fell to 125 in 1931 and below 100 in 1932. In Paris alone, the number of stories built fell from 4,571 in 1930 to 2,791 in 1931. With all due reserves as to the comparability of figures relating to " houses " in the case of taxation statistics, and to " stories " in the case of municipal statistics, it is nevertheless obvious that there has been a certain decline in house building in France. It is evident, too, that although the present position is unquestionably an improvement on that of 1920, it is still far from marking an advance on the pre-war level. This is in fact pointed out regularly every year during the budget debates on the credits for the application of the Loucheur Act. Quite recently, in a financial review, it has been estimated that throughout France as a whole there are

500,000 dwellings in need of thorough reconditioning, if not of complete reconstruction.

In Poland, as in France, practically all building activity was for a long time devoted to the reconstruction of buildings ruined by the war. For several years, however, there has been a steady increase in the number of new dwellings built. In towns with a population of over 50,000, for instance, the number of dwellings completed rose from 509 in 1925 to 1,215 in 1929 and the number of living rooms during the same period from 3,904 to 12,982. The figures for subsequent years, which relate to towns with a population of over 20,000, appear to show some slackening in the rate of progress. In 1930 the number of rooms in newly-finished buildings was 31,297, while in 1931 the number of new rooms in new and converted buildings together was 24,896. During the first half of 1932 the number of new rooms increased slightly as compared with the first half of 1931, but those remaining to be built during the year were appreciably fewer (12,849 instead of 15,556). In view of the magnitude of the current needs to be met and the arrears to be made up, this decline in building activity is certainly not due to over-production of houses for letting.

The same cannot be said of Hungary—at least, not altogether. Between 1920 and 1930 the total number of dwelling houses rose from 1,175,000 to 1,447,000, an increase of 25 per cent., which is far more than the increase in the population. During the same period the number of dwellings rose from 1,825,000 to 2,190,000. In this case, however, it should be noted that the large increase in the number of dwellings is due to the fact that building and repair work was concentrated mainly on very small dwellings. Thus, in the towns ranking as " autonomous ", while 9,700 dwellings were built in 1928, this represented an addition of only 19,000 living rooms, the corresponding figures for 1930 being 6,300 and 10,400 respectively. Similar evidence is offered by the " comitat " towns, where 7,000 dwellings with 11,300 rooms were built in 1928, and 3,850 with 6,200 rooms in 1930. In the capital this feature is still more marked, since the net increase in dwellings in 1930 was 7,600, and in living rooms 12,000. In contrast, therefore, to what has been done in certain other countries, it appears that in Hungary the building of houses for letting has been directed largely to satisfying the needs of the poorer classes of the population.

In a number of countries where building has passed through a period of great activity it has now more or less come to a standstill.

In Finland the average number of rooms built per year in Helsinki (Helsingfors) and in other towns in 1912-1913 was 5,522 and 3,472 respectively. From 1914 to 1920 building was almost entirely suspended in the capital, and considerably slowed down in the other towns. There was then a gradual revival, which continued up to 1930, when there was again a sharp decline. From 1914 to 1929 the number of new rooms built was 64,453 in Helsinki and 60,315 in the other towns. The extent of this decrease may be gauged by comparison of the number of new dwellings provided in the large towns, the figures being as follows : 9,547 in 1928, 7,238 in 1929, 1,001 in 1930, and 2,216 in 1931. If the comparison is based on the number of rooms, the fall is still more striking, from 22,522 rooms in 1928 to 17,641 in 1929, 4,647 in 1930, and 4,415 in 1931. A comparison of the data for 1930 and 1931 shows that during these years building was confined to meeting the need for modest housing accommodation. In spite of this the situation has very much improved in the last two years, but a rough calculation serves to show that there is still a considerable shortage of housing in Helsinki. If the average for 1912-1913 is taken as normal—a supposition which, as already stated, certainly calls for reserves—it will be seen that the 68,786 rooms provided in Helsinki from 1914 to 1931 are still 30,000 short of what would have been built at the pre-war rate, which would have produced over 99,000 rooms during the same period. In the other towns, however, house building appears to have been more active than before the war, 65,000 rooms having been built instead of the 62,500 which would represent the average pre-war rate of building.

In Italy a period of truly remarkable building development has been followed by an abrupt slowing down since 1930. The number of rooms built in 8 large towns was 22,444 in 1921, and in 1927 it rose to 107,373. It is estimated that from the end of the war up to 1931 a total of over 3,000,000 dwellings has been built, while during the same period the population has increased by 3,600,000. The return to the normal legal conditions of letting, however, has brought with it a fresh decline in house-building activity. In the 17 principal towns the number of new dwellings fell from 53,000 in 1929 to 26,000 in 1931, and 13,000

during the first seven months of 1932, the corresponding figures for new rooms being 187,000 in 1929, 92,000 in 1931, and 51,000 during the first seven months of 1932. In view of the rapid growth of the Italian population, there is no doubt that at present an annual increase of some tens of thousands of new dwellings cannot be sufficient.

In Germany a period of very great building activity has been followed by a decline, which, however, was not felt immediately owing to the vast extent of the work still in progress. Thus the restrictive effects of the Emergency Decrees issued from 1930 to 1932 were not felt until the latter year. The net increase in the number of dwellings, which reached its maximum of 318,000 in 1929, fell to 311,000 in 1930 and 234,000 in 1931, and will probably hardly reach 100,000 during 1932. This decline in house-building does not by any means denote a reduction in the demand. In the course of the discussions to which the Emergency Decrees have given rise, a number of writers have shown that to cover the normal needs of the population not a hundred thousand dwellings but several times that figure should be built annually for a considerable time to come.

In the United States of America the rate of building fell far below the normal average during the war, and in 1918 was estimated at only 40 per cent. of the pre-war average. In contrast to what took place in Europe, the revival began as early as 1919, although with some fluctuations, and continued to gain force until 1925, when there was again a rapid decline ending in an almost complete standstill in 1932. This movement is indicated by two sets of data. The statistics published by the Bureau of Labour Statistics for 256 towns show that, while in 1925 new dwellings were provided for nearly 500,000 families, the corresponding figure was only 125,000 in 1930, 98,000 in 1931, and about 30,000 in 1932. The estimates for the plans submitted for building permits, which amounted to about 2½ milliard dollars in 1925, fell to 430 million in 1931. During the first half of 1932 the value of these estimates was 76 per cent. lower than during the first half of 1931. In spite of general statements as to the prosperity and high standard of living of the inhabitants of the United States, it appears that their housing needs are far from being satisfied. According to American experts themselves, the housing conditions of a large section of the poorer classes in great cities such as New York are even more deplorable than anything

to be found in European cities. Hence it is not surprising that as a result of the Conference on Home Building and Home Ownership held at the White House at the end of 1931, it was decided to invest large sums in the building of small dwellings and to set up a Federal Home Loan Bank system for this purpose.

II.

It will be clear from the above analysis of what may be called the quantitative aspect of house-building activity, that, in spite of an encouraging improvement during the last ten years or so, it can hardly be maintained that the pre-war level of housing supply has been passed or even attained. All that can be said is that in a very few countries the housing situation is perhaps slightly better than before the war, owing to the installation of modern conveniences in most new buildings and in old buildings that have been modernised. In many other countries this is by no means the case; thanks to improved conveniences, however, especially in the way of collective services, it is possible that shortcomings in the quantity of housing accommodation are partly balanced by an improvement in its quality. On the other hand, it seems safe to say that in some countries, far from there being an improvement over pre-war standards, housing needs are being met less satisfactorily as regards both quantity and quality. Even if it is granted on a cursory view of the statistics that the dwellings provided are equal in quantity and quality to those of twenty years ago, it may still be maintained that this means a relative lowering of the standard of living. Since the beginning of the century, in fact, certain aspects of life have been completely transformed by the progress of technical invention. In view of the improvement in other directions—to take a single example, in means of communication—it is surely fundamentally wrong to take the dwellings of twenty years ago as a standard by which to judge the housing conditions of to-day.

But let us leave these somewhat technical aspects of the improvement in the quality of housing accommodation and focus attention on its strictly social aspect. A few individual and specially conclusive examples must suffice as illustration, since if the more deplorable housing conditions of the poorer classes were to be stressed there is not a single country that would escape mention.

In the first place we may consider what positive progress has been made towards the solution of a problem that was already present before the war, namely, the problem of the slum. It is obvious that to solve this problem it is not enough to do away with dwellings that are insanitary or devoid of the most elementary conveniences. To prevent the families evicted from the condemned buildings from again herding together in more modern but at the same time more expensive quarters, this process must be completed by a liberal building policy adapted to the needs and means of the individuals and families affected by slum clearing operations. Praiseworthy, if somewhat tardy, efforts to solve this twofold problem have been made in most countries. The war period merely aggravated a situation which was anything but satisfactory thirty years ago. At that time schemes were on foot to replace a number of town buildings, many of which had been hastily erected during the period of industrial expansion in the middle of the last century, by houses built on more modern and healthier lines. But the war put a complete stop to all such plans, with the result that, failing anything better, many towns are to-day still obliged to put up with dwellings that were considered unfit for habitation thirty years ago.

One of the most typical examples of this is presented by Austria, and more particularly by the municipality of Vienna, which has succeeded in providing over 45,000 working-class dwellings since the end of the war. The process was not unattended by financial difficulties, and there is therefore nothing surprising in the fact that at the present time house-building activities are being restricted by lack of capital. Nevertheless, the results achieved by the municipality of Vienna are remarkable enough to have engaged the attention of all who are interested in housing problems, and even of persons whose ideas are diametrically opposed to the methods adopted in Vienna.

It has already been stated that a very large proportion of the houses built in Hungary were dwellings for persons of small means. It is to be noted that even before the war a policy of cheap home building had been very widely applied in that country. In order to maintain this policy in the face of the shortage of capital in recent years, the public authorities have been obliged to resort to an expedient ; they have granted loans and subsidies to owners and builders, principally for the purpose

of adapting old dwellings or dividing them into smaller ones, so as to bring the resulting dwellings within the means of the poorest families.

In the Netherlands vigorous efforts have been made to clear the slum areas which were an open sore in some of the larger cities, notably in Amsterdam. The efforts made by the Amsterdam municipal authorities have also been followed with interest by all architects and town-planning experts. Whole quarters notorious for their insanitary conditions and lack of necessary conveniences have been completely cleared and rebuilt on rational lines. The slum clearance programme for 1922-1929 included the compulsory reconditioning of 2,747 dwellings and the voluntary reconditioning of 71,775 others. During the same period, 2,206 slum dwellings were condemned, a process which involved the eviction of a great many families. In 1930, 475 families were so evicted ; 146 of these moved into large blocks of flats, 246 into small houses, while the rest left the district or moved into accommodation of some other kind. At the same time, the municipal authorities of Amsterdam took steps to build dwellings within the means of the poorest of the working classes. Since the revival of building activity in the Netherlands, private enterprise has in fact confined itself to meeting the needs of the well-to-do, and perhaps of the more prosperous classes of workers. In Amsterdam, the number of dwellings at a rental of less than 130 florins a year fell from 6,695 in 1926 to 4,611 in 1930, while the number of dwellings at an annual rental of over 350 florins rose from 80,675 to 101,864. It is estimated that the average worker cannot offord to pay more than 250 florins a year. The municipal authorities of Amsterdam have succeeded in providing dwellings at rents appreciably lower than the commercial rents required by buildings constructed by private enterprise. During the second half of 1926 1,500 dwellings were begun ; 1,550 more were begun during the second half of 1929, and a further instalment in 1931. These dwellings are let at 4.50 florins a week, or about 235 florins a year. Of the dwellings built by the municipality, 1,312 have two rooms, 3,343 three rooms, 4,243 four rooms, and 1,120 five rooms, not counting the kitchen.

In Switzerland, too, where building, as in the Netherlands, is predominantly a matter of private enterprise, the municipal authorities have found it necessary to provide dwellings for the

poorer classes either by building on their own account or by granting subsidies to undertakings for the purpose. In Zurich, for example, the municipal authorities have subsidised the building of dwellings for large families with an average reduction of 25 per cent. on the normal rental ; they have also built settlements in which most of the dwellings are three-roomed. Generally speaking, the proportion of small dwellings has risen considerably in Swiss towns ; this is indicated by the following table, which shows the number of new dwellings containing one to three rooms per 10,000 inhabitants (annual averages) :

Town	1914-1918	1919-1923	1924-1928
Zurich	17.2	16.4	60.5
Basle	12.4	19.4	47.7
Berne	11.4	40.9	55.3
Saint Gall	0.4	1.2	0.9
Bienne	7.7	17.6	50.6
Thun	11.1	37.4	37.7

It is certain that efforts of this kind are resulting in an appreciable improvement in the average housing conditions of working-class families.

Similar examples might be cited for many other countries, but it should also be noted that in some cases this policy of raising the standard of housing from the bottom upwards was not applied at once. In Germany the results achieved by a policy of intervention by the public authorities were indeed remarkable, in respect of both technical achievement and the amount of new building. But when the effects of the economic depression began to be felt it was seen that the new dwellings built were mainly for the middle or well-to-do classes—so much so, indeed, that at the present time there is the paradoxical situation that large numbers of new flats are standing empty in the suburbs of Berlin, while thousands of families are still housed in huts or old railway carriages. In 1930, for instance, there were 360,000 dwellings in Berlin consisting only of one room and a kitchen ; over 11,000 families were living in huts or other ramshackle quarters, and over 7,000 were living in buildings which ought to have been pulled down at once.[1] It would be wrong to say that the public authorities have done nothing to remedy these mistakes. As soon as the policy of economy was initiated, i.e. immediately after the issue of the

[1] Cf. INTERNATIONAL HOUSING ASSOCIATION : Publication I, pp. 11-12.

first Emergency Decrees at the end of 1930, it was decided that the available credits should be devoted mainly to the construction of cheap dwellings. At the same time, the Federal and State Governments set on foot vast schemes to clear overcrowded town areas and to encourage some at least of the unemployed workers in the towns to go back to the land. As a result of this policy, the proportion of small dwellings (i.e. not more than three rooms and a kitchen) increased considerably, rising from 50 per cent. of all dwellings built in 1930 to 58 per cent. in 1931. As a considerable number of large dwellings were lying empty as a result of the economic depression, the public authorities went even further. Under the last Emergency Decree, issued in June 1932, a special sum of 50 million marks was allocated to provide credits for the owners of old houses who wish to modernise them, and in particular to convert them into flats.

In Belgium, the National Society for Cheap Houses and Dwellings, as its name implies, has already done much to improve the living conditions of the workers. The task, however, is immense, and in particular there are still many slum areas in the large towns. In the preamble to the Act of 22 July 1927 the number of insanitary or overcrowded dwellings was estimated at over 100,000. Of the 300 million franc loans which the National Society for Cheap Houses and Dwellings was authorised by the Government to issue in 1928, and again in 1931, 100 million francs were devoted exclusively to the campaign against insanitary dwellings.

In France, while the first results of the Loucheur Act may appear to have been remarkable, they are in reality nothing but a palliative. Building activity during the years before this Act came into force was at first entirely absorbed by the reconstruction of the devasted areas, and was subsequently concentrated, much as in Germany, on middle-class housing, and even in many cases, notably in the larger towns, on luxury flats. It is also possible that a fair amount of activity has been spent on seaside bungalows and similar constructions. However this may be, it is, as already stated, generally agreed that the housing problem is still very far from being solved in France, and that it must constitute a highly important item in the programme of national equipment. It may be recalled that the number of dwellings in need of reconditioning or replacement is estimated at 500,000, representing a capital expenditure of 15 milliard francs.

The position in the United States, where building has been almost entirely at a standstill for several months, has been mentioned above, and so also have the deplorable housing conditions in some quarters of American cities. Some interesting efforts have however been made to remedy the situation ; among them may be specially mentioned the partial solution of the problem of housing the coloured population, " negro housing " being in fact one of the special problems of American town-planning experts.

These are some typical examples both of what has been done and of what has been left undone for the improvement of the housing conditions of the poorest sections of the working classes. Needless to say, the examples quoted are far from exhaustive. No account at all has been taken of the needs of Near Eastern countries ; to quote a single case, and probably by no means the most extreme one, the following particulars of the housing conditions of tobacco workers in Greece are given in the Greek Statistical Year Book for 1931. Out of 9,726 dwellings inspected, 641 were found to be in basements and 5,380 consisted of a single room. The average number of inmates per room was 3.6 in one-roomed dwellings, and in some towns it even reached 4.3. These conditions are probably partly due to the settlement of the refugees, since it was obviously impossible, without causing overcrowding in existing dwellings, to house the hundreds of thousands of refugees who thronged around such centres as Athens and the Piraeus. In other Near Eastern countries the growth of the towns has given rise to similar conditions. In Belgrade, for example, according to some estimates, there is at present a shortage of 10,000 dwellings. This shortage of housing, and especially of housing for the working classes, is clearly common to all countries undergoing a process of industrial expansion. As already stated, the U.S.S.R. may be left out of account, since the political conditions which distinguish it from the rest of the world make it a case apart. But much could be said of other countries, such as India, where the housing conditions of industrial workers in centres such as Bombay or Ahmedabad raise problems of the highest importance. In China, too, the housing conditions of the workers are specially deplorable and cannot but foster the disturbed situation which prevails, for example, around the foreign concessions.

It may further be noted, as a characteristic symptom of the

position, that the Japanese workers' delegate to the Sixteenth Session of the International Labour Conference brought up the question of workers' dwellings in his country, laying special stress on the conditions endured by women workers in the dwellings provided for them by their employers.

In most countries, indeed, the slum problem is engaging the attention of Governments, and even where the greatest efforts have been made to solve it, it is recognised that the results so far achieved are wholly inadequate. To illustrate this point, reference may be made to a speech delivered by Mr. Unwin, the apostle of the town-planning movement, at a housing exhibition held in September 1932. Is it not a shame, he said, that such a great and wealthy country as Great Britain should still be disfigured by such wretched slums ? And yet Great Britain is a country in which the most praiseworthy efforts have steadily been made in this sphere during the last ten years, efforts which will be reinforced by the slum clearance provisions of the 1930 Housing Act and by other legislation on rural housing.

The situation in France, another country which is considered rich and powerful, may be illustrated by the opinion of Mr. Jean Larmeroux, President of the International Building Property Union. He states that, far from being already closed, the market for dwellings at low and moderate rentals has hardly even been opened. The demand is still far from being met, and thousands of families—civil servants, lower middle class, professional workers, etc.—are still without a home suited to their needs and position. Some are obliged to live in furnished rooms in hotels, or to seek a home in some distant suburb, while others are anxious to escape from badly lighted and badly ventilated quarters. As to the problem of workers' dwellings, Mr. Larmeroux declares that its complexity is beyond him. Here, too, in spite of the efforts made by employers to build dwellings for their staff, it cannot be said that the demand is anywhere near being met.

III.

What has been said above clearly shows that there is no over-production in house building ; on the contrary, there is and always will be a constant demand for the satisfaction of current needs. Is it possible to make any kind of rough estimate in this

respect ? Great caution is of course called for in making such calculations ; but taking into account the present marriage rate and mean expectation of life it is probably no exaggeration to estimate current building requirements at one new dwelling for every 2 or 3 new inhabitants. Without attempting to consider all the 2 milliard inhabitants of the world to-day we may limit our calculations to Europe, excluding the U.S.S.R. We thus arrive at a total of about 380 million, with an annual increase of slightly under 3 million. If, therefore, the normal rate of growth of building is taken to be one dwelling per 2.5 new inhabitants, it is evident that in Europe alone over a million new dwellings are required each year. This is a very substantial figure, involving roughly the investment of ten milliard gold francs and the employment of several hundred thousand workers.

But in addition to this there is still a great deal of leeway to be made up. Two notable examples may be cited, both for countries at a high stage of civilisation. For France, as already noted, the number of unsanitary dwellings is estimated at 500,000, a figure which probably falls short of the truth rather than the reverse. [1] For Germany, it is estimated to-day that there are 300,000 unsanitary dwellings which should have been pulled down during the last twenty years. If to these are added the dwellings which should be scrapped during the next ten years, amounting to 200,000, it will be seen that the figures for Germany are substantially the same as those for France. The populations of France and Germany together constitute only a little more than a quarter of the whole population of Europe. It may therefore safely be assumed that the number of dwellings to be replaced in Europe, excluding the U.S.S.R., is at the very lowest estimate two or three million.

It follows that to provide satisfactory housing conditions for the working classes of Europe, some ten to fifteen million dwellings would have to be built during the next decade. This estimate also covers rural housing, a form of building which presents its own special problems. But for the larger urban centres alone (i.e. towns with a population of several thousands) it is quite certain that several million dwellings would have to be constructed in all. It is at once obvious that this problem is

[1] Mr. Augustin REY, writing in the *Journal de la Société de Statistique de Paris* for October 1932, goes much further, estimating that there are 3,000,000 *houses* in need of reconstruction, complete renovation, or replacement.

one of vast extent, offering scope not only for national but also for international schemes, which may provide markets for a large number of industries and set to work a vast army of workers. But the methods by which operations on so large a scale can be set on foot naturally need careful consideration. In the first place, it may be noted that in nearly all countries there already exist bodies with the necessary experience for carrying out extensive schemes of cheap building. These are of several kinds. Some are national, such as the National Society for Cheap Houses and Dwellings in Belgium ; some may be described as semi-public, such as co-operative organisations ; some are private bodies but under public supervision, such as approved public utility companies. These are the bodies which might act as the administrative framework for a vigorous revival of house-building activity. It may be added that, as a rule, these bodies are armed with all the legal powers necessary to carry out schemes in which the public has a predominant interest. Most countries already possess legislation on cheap dwellings, and a great many also have regulations on town planning, sanitary conditions, etc. What may be called the administrative machinery for the implementation of large-scale workers' housing schemes thus lies ready to hand.

It is hardly necessary to stress the labour aspect of the question. At the present time the building trade in nearly every country is working below its normal capacity, and vast armies of building workers are without employment. According to figures quoted to the International Federation of Building Operatives in 1932, the proportion of workers unemployed, making due allowance for seasonal fluctuations, was as much as 70 or 80 per cent. In Great Britain it is estimated that if conditions of employment were to remain the same, there would be 200,000-250,000 building workers permanently unemployed, and this in a country where unemployment in the building trade is not particularly acute at present, having varied in 1931, according to the season, between 18 and 28 per cent. of the organised workers. In the Netherlands 43 per cent. of the workers were unemployed at the end of 1931. In Germany, the proportion of organised building workers out of employment varied according to the season between 57 and 86 per cent. in 1931 ; here again the average level of unemployment may be estimated at 300,000-400,000 workers.

A movement for the revival of building, at any rate of house building, could certainly command a large body of experienced workers. An objection which at once arises in this connection is the seasonal nature of the building trade, but this objection is probably somewhat exaggerated. In fact, thanks to the most recent technical improvements and the mechanisation of various operations, what is called the building season has already been appreciably lengthened.[1] In view of this change in building customs it will undoubtedly be possible to count on a working period for building operatives similar to that of industrial workers in general. Another objection is that the demand for labour will vary considerably from country to country. There is, however, nothing to prevent the distribution of labour from being carried out without regard to local or even to national considerations, building being the one trade above all others in which labour has always been comparatively mobile. If a kind of international labour exchange were one day to be set up, it would certainly find an immediate field of action in the distribution of building workers.

What are the prospects of building schemes of this kind from the technical standpoint? During recent years town planning principles have made much headway; whether the subject is garden cities, "lineal" cities (ribbon development), or functional towns, every problem has been discussed and considered from every angle. The one point on which all town-planning experts seem to be agreed is that towns in their present form no longer correspond to the progress of technical improvements. In particular, the traffic problem now gives rise to difficulties that were unimaginable twenty or thirty years ago. To enable a rational use to be made of the means of transport available to present-day society, not only the towns but also very many rural communities would have to be entirely transformed. Within the towns themselves certain architectural problems urgently call for solution. How, for instance, should building sites be utilised? Should houses aim at vertical or horizontal extension? Is the ideal form of dwelling the small single house or cottage, which has great advantages as far as the use of the workers' spare time is concerned, or would it be simpler and more economical to

[1] Cf. Dr. Ernst BERNHARD: "Winter Building as a Remedy for Seasonal Unemployment", in *International Labour Review*, Vol. XXIV, Nos. 2-3, Aug.-Sept. 1931, pp. 176-200.

plan towns on vertical principles with large open spaces, a system which also provides facilities for the employment of spare time, but more in the form of collective activities ? As regards interior arrangements, recent technical improvements have undoubtedly made considerable architectural changes in dwelling houses possible. Thanks to the progress in canalisation work, for example, a number of domestic arrangements which formerly took up a great deal of room can now be confined within a very small space, e.g. water, gas, or electricity supply, central heating, drainage, etc. All the preliminary data necessary to carry out expansion schemes planned with due regard for both architectural and economic factors are thus already to hand.

The same is true on the technological side. In recent years there has been an enormous advance in mechanisation and standardisation in the building trade. This improvement is quite general, and present-day building undertakings are so equipped as to be able to build much more rapidly than some twenty years ago and with fewer workers. An example cited in a report of the International Federation of Building Operatives shows that a large building firm in Berlin which had only some twenty machines in 1913 had nearly two hundred in 1928. In particular, the number of concrete mixing machines rose from 2 to 30, and of electric motors from none to 90, while the firm also now possesses excavators, works locomotives, and many other machines which were not in use by it twenty years ago. As far as building materials themselves are concerned, in addition to raw building materials (stone, wood, etc.), account must now also be taken of the rapidly increasing use of materials that have already undergone a process of transformation, such as cement, brick, tiles, etc. Experiments have already been made in the construction of sectional houses. The large-scale manufacture of sections of walls, or even of entire walls, made of cement has entered the realm of the practical. It is contemplated in the United States, and the only difficulties at present hampering its development are difficulties of transport (width of roads, height of bridges, etc.). Still further progress is possible in other branches of the interior equipment of houses or in general services, e.g. in the use of iron and steel, and above all of piping. To realise this it is enough to recall the needs of an urban community, however small, which has to be supplied with running water or gas for lighting and heating.

Finally, the last consideration, and the most important in the present circumstances, is the financing of such schemes. It must obviously be granted at once that, except in the case of dwellings provided for the workers by their employer, who tends to look upon this investment as one of the social charges on production, private capital has proved itself more or less incapable of achieving any considerable results in the sphere of cheap home building. As stated at the beginning of this article, this is fundamentally due to the lack of adequate immediate profits. At present, indeed, housing is clearly beginning to come under the heading of services that do not pay. To a certain extent at least, housing, or at any rate working-class or minimum-standard housing, is in the same position as education, social insurance, or the maintenance of ways of communication; the responsibility for ensuring these services is being shifted more and more on to the community as a whole. If this were not so, not only material but also intellectual and moral living conditions would depend too closely on the will of a single individual or of a small group of individuals.

This fact has been generally recognised for some time, and Governments or public authorities in general have found it necessary to finance the building of cheap dwellings more or less directly. So far as can be judged, the authorities do not appear to have lost on these operations. In a number of cases, indeed, all they have done has been to guarantee the loans raised. Their intervention has also often made it possible to mobilise large capital resources, such as savings bank deposits.

At the present time, owing to the international distribution not only of the financial resources but also of the technical resources of building firms, the financing of house building often seems to overstep national boundaries. In view of the magnitude of the problem and the probable necessity of international schemes, it is only logical to contemplate the institution of international bodies to finance operations on so large a scale. Would it be possible, for example, to consider the formation of an international bank for the construction of working-class dwellings? Without ignoring the probable difficulties of such an enterprise, it may at least be presumed that such an establishment would be in a position to mobilise capital more easily than industrial undertakings proper are able to do to-day. It would obviously have to keep in close touch

with all the bodies already existing in this sphere: international federations of contractors, architects, and workers, as well as all international organisations concerned with town-planning questions. It is by the combined efforts of all such bodies that it would be possible to work out rational schemes genuinely adapted to the needs and purses of the working classes. In any case, the first necessity to-day seems to be that these various organisations should realise the imminent danger of a suspension of house building, and should seek in concert to establish the basic principles of this common action.