THE IMPROVED INDUSTRIAL DWELLINGS COMPANY

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Quite close to Bethnal Green station, and clearly visible to any traveller by rail, is a large, rather forbidding housing estate consisting of a series of high, closely spaced terraces, running, like a series of canyons, into the distance. A plaque on a gable proclaims that these are the homes of a thousand working-class people, built by the Improved Industrial Dwellings Company. What was this company, and why was it necessary for it to build this huge estate? The answers to these questions are of interest because they take us away from the familiar paths of nineteenth century architectural history, into backwaters which are omitted from most books dealing with the period. But the history of the housing movement during the years 1840–90 provides many of the clues for the subsequent tremendous popular appeal of Ebenezer Howard's Garden City movement, with its cult of low-density development and its negation of the town as an urban entity.

The Improved Industrial Dwellings Company was founded in 1863, some twenty years after the first wave of concern for the condition of the poor. Before the middle of the century the social changes created by the industrial revolution had brought about a housing problem which did not exist, at least on such a large scale, when the working population was not so dependent upon the urban centres for its subsistence. The growth of the north country mill and factory communities is well known, but it was paralleled by the development of existing cities and particularly of London, already a vast organism by early nineteenth century standards, and one which developed special problems as the century advanced. Traditionally, housing had been built according to the law of supply and demand and during a century of slow growth the system worked quite well. The nature of eighteenth century industry also meant that the congregation of great numbers of working people in one place was rare, so the problem of the poor did not make itself so apparent when it was dissipated throughout the countryside.

During the industrial revolution large numbers of poor agricultural workers left the country and gravitated to the industrial centres, and as mechanisation increased, so did the working population of each town multiply. Most towns which enjoyed commercial prosperity during the last century therefore possess large areas of high-density working-class housing built around the factories and mills. But in London particularly, the areas of new housing were soon too far out to permit a man to walk each day to work; and furthermore, large numbers of working men were unable to afford the rent or the purchase price of a new house, however small. These people, the really poor, who formed a large part of the working population, inhabited the houses in more central parts of London which were once respectable but were now in decline, let off room by room; and they filled the courts and 'rookeries' which were built behind the streets on land which had once been garden. Overcrowding, then, had become a vicious problem long before the middle of the century when the following account[1] was written:

> I squeezed my way, somewhat crab-fashion, into a paved court, certainly of greater width than the low archway by which I had effected an entrance, but so narrow that the broom sticks which projected

> from almost every window, with articles of wearing apparel in various stages of dilapidation suspended upon them, peered most obtrusively into the opposite dwellings . . . There is no drainage whatever to many of these houses, the refuse and waste water is thrown from the windows on to the surface of the court, down which it flows, or remains, as the case may be . . .
> Two privies, situated at the far end of this alley, which I found in a state of inconceivable filth, are all the accommodation provided for this large number of people; (200 people in 20, two-roomed, back-to-back houses).

The condition of the larger towns first began to attract serious public attention after the arrival of cholera in England during 1832, and subsequent outbreaks led to a series of enquiries which showed up the magnitude of the overcrowding problem and especially its effect upon health. First there was the Poor Law Board Report, prepared at the instigation of the government during the years 1839–42 and largely the work of Edwin Chadwick, the Secretary of the Board. It was followed in 1844 by a Royal Commission on the Health of Towns, which reported in 1844 and again in 1845, endorsing Chadwick's findings, and showing up still further the filth and squalor, the absence of adequate drainage and water supplies, the inadequacy of existing legislation, and the need for medical officers and inspectors. The outcome of this unprecedented sequence of reports was the first Public Health Act, passed in 1848, an epoch-making measure, although in many ways ineffectual and tentative in its provisions.

The Early Societies

Meanwhile, there had been public action of a quite different kind, although inspired by this same astounding revelation of the deterioration in urban conditions. This was the establishment of the first 'model' housing agencies in London.[2] The earliest was the Metropolitan Association for Improving the Dwellings of the Industrious Classes, which was founded by the Rector of Spitalfields in 1841, and began building a block of tenements in Old St. Pancras Road during 1847. It went on to erect a model lodging-house and another block of dwellings in Spicer Street two years later. The second important body was the Society for the Improvement of the Condition of the Labouring Classes which was a reconstituted version of the Labourers' Friend Society, largely reinvigorated by the efforts of Lord Ashley and Dr. Southwold Smith. Its intention was to explore the different ways of housing the poor, rather than to build large quantities of dwellings, and the profit which it could make was limited to a self-imposed maximum of 5 per cent. The Society's first venture was in Bagnigge Wells where in 1844–6 they constructed a street of flats, houses and a lodging-house designed by a London architect, Henry Roberts. This preceded the work of the Metropolitan Association, but it was a very tentative development which was much criticised on various grounds. The Society then proceeded to build and convert a number of lodging-houses before embarking on an important block of truly 'model' dwellings in Streatham Street, also designed by Roberts. These were completely self-contained flats, reached by a series of open galleries, and they established a standard of accommodation well in advance of anything available at the time. But the rents charged were high, attractive only to the artisan, and even then, the building did not show a sufficient profit to encourage commercial investment in similar ventures. The Society, and Roberts, its architect, were then linked with the construction of model cottages at the Great Exhibition of 1851. These were intended to be an ideal solution with special details to ensure good health amongst the occupants. They were also a prototype capable of expansion both linearly and vertically. The cottages attracted considerable attention, and they provided the inspiration for the first

buildings erected by the Improved Industrial Dwellings Company ten years later. Meanwhile they were the model for a number of less ambitious schemes elsewhere in the country.[3]

The model-dwellings movement was born in the first flush of evangelical zeal and it possessed all the earnestness and fervour which characterised the period. But there was a limit to what an exemplary society could achieve if it was not to enter the field of house-building on a more commercial basis. Similarly the Metropolitan Association, which at the outset had difficulty in raising capital, was dependent upon commercial success for further investment. Its dividend declined, until by the middle of the next decade investors were considering themselves lucky to receive a return of 2 per cent each year. Finally the Crimean War was to prohibit building of the kind carried on by these two organisations, since prices rose sharply; and although the Metropolitan Association struggled to raise more money, and succeeded in purchasing and converting some old property and even extending its Spicer Street estate, the last few years of the decade were characteristically despondent, and it seemed unlikely that there would be more model dwellings.

The Peabody Donation Fund

The gloom was dispersed soon after 1860 by two events. The first was the announcement by a wealthy American businessman and banker, George Peabody, who had settled in London, that he was setting up a Fund 'to ameliorate the condition . . . of the poor . . . of London',[4] The Trustees of the Fund decided to concentrate on the construction of housing and began what was to be a long series of developments with a block of tenements and shops in Commercial Road, which were opened early in 1864. Peabody's initial gift was £150,000 but he added to this and the total sum which he invested in the Fund amounted to £500,000. This, of course, was a philanthropic venture, and while the Fund provided a large quantity of housing it did not play a significant part in the expansion of model house-building as a commercial enterprise because, like S.I.C.L.C., the Trustees imposed a limit to the profit made out of their buildings, in this case just sufficient to make the Fund self-perpetuating.

The second event was a new attempt to show that working-class dwellings could be built on a commercially profitable basis, and this was an important and necessary step if the poor were to have any hope of better homes in the central areas of the metropolis. Out of this experiment grew the Improved Industrial Dwellings Company.

Sydney Waterlow

Sydney Waterlow, the inspiration behind the Company, was born in 1822, the son of a London stationer. His life story was typical of the many successful careers built in the Victorian era.[5] Together with his three brothers he was responsible for turning the small family business into the great printing house which still today bears their name. But in addition to this commercial success, Waterlow was interested in politics, particularly in the social problems of the city where he made his fortune. He was first elected a Common Councillor for the Broad Street Ward in 1857, and five years later he became Alderman for Langbourne. Knighted in 1867, when he became Sheriff, he was Lord Mayor in 1872, and two years later he entered Parliament, where he played a significant part in matters concerned with housing, a subject with which he was well acquainted, and by that time an acknowledged expert.

In the early days of his political career Waterlow became interested in housing, and against the background of despair and declining activity amongst the early societies, which has just

been described, he determined to show that building working men's homes need not be unprofitable for commercial companies. During 1863 he built, entirely at his own expense, a block of tenements in Mark Street, Finsbury, known as Langbourne Buildings. His intention was specifically to show that this kind of building could be erected at a cost which would allow rents compatible with the incomes of artisans, while still producing a profit of 5 per cent for the owner. Waterlow proceeded with the venture privately because he wanted to prove to his more sceptical friends that his scheme was possible, and that they might safely invest their money in the company which he hoped to float.

Langbourne Buildings were evolved, rather than designed, by Waterlow in conjunction with a builder, Matthew Allen. Together they decided to dispense with the services of an architect—in order to save money, they claimed—and the plans which they used were an adaptation of the model cottages designed by Henry Roberts for the Great Exhibition in 1851.[5] There was a central staircase with a small open balcony at each floor, facing the street, giving access to the tenements. Waterlow and Allen extended the design vertically, as Roberts had intended, to five stories altogether, and eventually they repeated the unit several times, making in effect a terrace. This much did they take over from the earlier model design, but the planning of the individual dwellings was modified and revised to suit their particular purpose, and on the whole the result was less satisfactory.[6] The scheme was criticised, when it was completed, by one architect who claimed it would be impossible to take a coffin down the staircase, which was steep, narrow and full of winders; and the *Builder* roundly condemned the internal planning, but noted with some pleasure the economy in construction, the use of concrete to form the floors and roof and for such details as door and window lintels, where stone would normally be employed.[7]

In reply to these criticisms Waterlow himself described[8] the intentions which prompted him to build:

> All that I have endeavoured to show is that capital, expanded in the erection of light, cheerful, healthy habitations for the industrial classes in crowded cities, may be made to yield a fair interest on its investment, if care is taken to avoid extravagance in external architectural decoration or loss by large management expenses.

The Foundation of the Company

The outcome of this successful experiment was a public meeting, held at the Mansion House in June 1863, to inaugurate an 'association', and to raise subscriptions.[9] The tangible results of Waterlow's achievement seem to have provided sufficient incentive for investment, since the following October the company was considering the erection of buildings for 100 families near King's Cross. This scheme was later known as Stanley Buildings, after Lord Stanley, the first chairman of the Company, but they were not, in fact, the first dwellings to be completed.

At the first Ordinary Meeting, held in March 1864, it was reported that several sites had been purchased. A number of small houses in Hamilton Row, Bagnigge Wells Road, had been bought; a site near the Tunnel Pier at Wapping had been acquired from the Bridewell Hospital; another in Redcross Street, Borough; and negotiations were still in progress for sites in Victoria Street, King's Cross and Shoreditch.[10] It was confidently proposed to build on all of these, which, for a company in the first year of its life, suggested considerable vigour and financial stability. Indeed, it was, in some ways, more ambitious than the Peabody

PLATE 1 (a)

Tower Buildings, Wapping; part of the rear elevation.

PLATE 1 (b)

Palmerston Buildings, City Garden Row; detail of balcony.

PLATE 2 (a)

Gladstone Buildings, Willow Street.

PLATE 2 (b)

Part of the Bethnal Green Estate.

Trustees at this time, and there was a marked contrast with the tentative approach of the Metropolitan Association some twenty years earlier.

The erection of buildings proceeded with similar speed: Cromwell Buildings, New Southwark Street were the first to be occupied, during 1864, providing accommodation for twenty-two families in one five-storey block which incorporated two shops (fig. 1). By the following spring a larger building consisting of three consecutive staircase 'units' had been finished in Wapping, and these were named Tower Buildings (pl. 1(a)). They housed sixty families, but unfortunately their popularity depended upon the fortunes of local trade and industry and there were frequent vacancies in lean times. Work was also proceeding on Cobden Buildings at the Hamilton Row site, where the terrace of small cottages was being replaced by eighteen flats and two shops.

Stanley Buildings, Pancras Road, were completed later in 1865, the first scheme to involve a series of independent blocks related to one another. This was the largest of the company's estates, housing one-hundred-and-four families, and there was great demand for the accommodation, since the Midland Railway Company were demolishing much property in the area. Palmerston Buildings were completed on a site nearby during the next year (fig. 2), and *The Times* paid considerable attention to the opening of this estate, describing in detail the buildings, with their two- and three-roomed tenements, each with a living-room containing a cupboard, a range with a boiler and oven, a scullery with a sink, water-cistern, small fireplace, washing-copper and dust-shoot, and off the scullery a W.C.[11] There was an interesting comparison here with the work of the Peabody Trust which throughout this period chose to build 'associated' tenements, that is a series of one-, two- or three-roomed flats sharing on each floor communal sculleries and lavatories. In this way there would be less risk of misuse of W.C's., as they would be in positions where they could be more readily supervised and controlled.

The reception which these early buildings received was well described, if a little picturesquely, in the *Daily Telegraph*,[12] which singled out the small scheme in Hamilton Row;

> A really cheerful, pleasant-looking pile is that which now replaces the six dirty dwellings of Hamilton Row, Bagnigge Wells. The entrance, with its green gates and newly painted doorways, is not altogether unlike the front of a theatre or place of amusement. A winding staircase in the middle lands you, at every floor, on the corresponding balcony in front, so that in ascending to the flat roof of the building you make a series of public appearances. (pl. 1(b)) You have your exits and your entrances, each being on a different stage, till you come upon the last scene of all, which is that same flat roof, arranged to serve the inhabitants of the several floors as a drying ground for clothes. Some of the tenements have only two rooms, and others three, but attached to all of them are closets and wash-houses, making each abode a completely comfortable habitation. The windows open outwardly, like the old-fashioned English lattice, and like the casements of the houses throughout Continental Europe. Derangement and breakages of sash-lines are thus avoided. The ventilation is perfect everywhere, and the honest solidity of the structure is an advantage that the humble occupants can boast over those unfortunate members of the middle class whose houses are generally called 'villas', and whose landlords are mostly speculative builders understanding but two qualities of domestic architecture—the showy and the cheap.

Waterlow added three more staircase 'units' to Langbourne Buildings during these years, and the City authorities, doubtless inspired by the success of the Improved Industrial Dwellings Company, constructed a building for some 160 families, which was one of the early and rare examples of 'council' housing. The buildings, which were in Farringdon Road, were very similar to those of Waterlow's Company. They were completed in 1865.[13]

After Palmerston Buildings, the Company's next work was at Britannia Street, where

Derby Buildings were completed during 1867–8. Four of the staircases followed the standard arrangement of the earlier estates, but the remaining two were an experiment with minimum planning. For the first time the self-contained flat was abandoned in favour of a series of rooms sharing sculleries and lavatories. However, there were too many single-room flats, which were disliked by the tenants, and after a few years, during which the flats were often empty, they were converted into self-contained dwellings in 1871; each pair of associated units being linked to form one self-contained flat.

In common with all the societies, trusts and companies which had attempted to build working-class housing, the Improved Industrial Dwellings Company was criticised for its policy, and accused of providing homes only for the superior artisan, rather than the poorer working man whose need was greatest. At the half-yearly meeting held in February 1867 the Company first found it necessary to defend its policies: it was pointed out that the rents asked were cheerfully paid, and that there was always a great demand for rooms when there were vacancies.

All these model dwellings were for artisans. No company attempted to solve the problem of housing the poorer class of workman, because it was unprofitable to build for them, and they presented management problems that few except Miss Octavia Hill cared to face. At the Royal Commission on Housing in 1885, Waterlow spoke in retrospect of the Company's attitude:[14]

> We must take the class as of various degrees; the upper, middle and lower of the labouring classes; it would not have been right to build down to the lowest class, because you must have built a class of tenement which I hope none of them would be satisfied with at the end of 50 years; we have rather tried to build for the best class, and by lifting them up to leave more room for the second and third who are below them.

Four years previously James Moore, the Secretary of the Company, had appeared before the Select Committee on the housing of the working classes, and in reply to the question 'But it appears from your list of occupations, that you do not deal with the very lowest class?' he replied:

> We do not, for the reason that we are unable to solve that problem. The cost of providing the dwelling would be greater than these people would be able to pay us a return upon, that is to say the very poor; but then I have always felt that the accommodation of the very poor was a matter for the Peabody Trustees; that the fund was specially appropriated to the poor of London, and not to the artizan, and if the Peabody Trustees take in the artizan class at less than the market value of the tenement, I say that they are gradually pauperising the working classes of London.

The experimental blocks at Derby Buildings were not repeated; and the Company reverted to self-contained flats for artisans. Waterlow was still seeking ways of building more economically; and the joinery work in all probability for Derby Buildings, and certainly for the next building in Nelson Street, Greenwich (built in 1868 on the original Palmerston Buildings plan, which now became a standard pattern) was brought from Stockholm, where even allowing for the additional transport costs across the North Sea it cost 25 per cent less than in England.[16]

One further scheme completed this group of estates. This was Gladstone Buildings in Willow Street which was opened in 1869. A large and imposing terrace six storeys high, this was punctuated down its length by the familiar access balconies (pl. 2(a)).

In 1868 steps were taken to purchase a site in Bethnal Green and on it was built during the next two decades the Company's largest estate. Land was becoming both expensive and hard to find in suitable areas of London, and this site provided the scope and incentive for housing

development during a particularly difficult period after 1870. By virtue of the Labouring Classes Dwelling Houses Act of 1866 the Company was now able to borrow money from the government at very favourable rates of interest, and this, in addition, helped to create a hopeful outlook just before 1870. By 1874, it had borrowed a total of £84,000 and this sum made it less imperative for the directors to seek capital investment on the open market when the interest rates demanded were particularly high.[17] On the whole, however, the Company did not seem to have much difficulty in raising money through the normal channels of public investment when it required to do so.

The Company and the Peabody Donation Fund

Between 1864 and 1870 the Improved Industrial Dwellings Company had been remarkably active for a new body dependent largely upon public support. Eight separate sites had been purchased and buildings erected on them, and there were prospects of continued work in the next decade. Mention has already been made of the work done by the Peabody Donation Fund during roughly the same period, and a more detailed comparison of the attitudes shows the divergence of opinions between the two organisations. Both aimed at accommodating the same class of tenants, the artisan, although the Fund was able to charge rather lower rents because of its philanthropic policy, and both were consequently criticised for failing to solve the problem of housing the very poor, which neither set out to deal with. There was a certain similarity in building policy, although while Waterlow worked exclusively with his builder, Matthew Allen, the Trustees of the Fund employed an architect, Henry Darbishire, who nevertheless also used the services of only one builder, Cubitt. The Fund decided at the outset to build associated tenements, and then stuck to that policy, evolving a succession of standard plans which each served a group of estates. The Peabody estates were all large in scale by comparison with those of the Company, and between 1862, when the Fund was founded, and 1870, the Trustees completed six, as opposed to the Company's eight, although in each case the buildings were on a scale much grander than Waterlow was able to contemplate. It was possible for them to lay out their sites as complete detached estates, usually railed off from the outside world with a series of blocks surrounding a private square. By contrast, with the exception of Derby Buildings, all the early Company buildings were repetitive units strung out along the full length of the available site, which was usually just a thin strip of land fronting on to a street—and there was little spare land at the rear. The appearance of the Company's buildings was on the whole more attractive than those of the Fund, although the effect of tall blocks where once there had been mere cottages was inevitably overpowering, and usually the density was increased many times. The series of open balconies did much to relieve the 'barrack-like' appearance which so often resulted from model-dwelling construction, and while the overall effect was doubtless hybrid, and hardly comparable with the architectural achievements in other branches of building at that time, they were more humane than the massive Peabody Squares at Shadwell, Islington, Chelsea and Westminster.

The rear elevations of the Company's buildings were never very attractive, and here more than anywhere else was the absence of the services of an architect most noticeable (pl. 1(a)). Probably in the interests of good health Waterlow decided to detach the sculleries and lavatories from the main block in a series of projecting wings at the rear which gave to all the early estates a characteristic elevation which was at once irregular and ugly, besides cutting

off the light from rooms within the main block. The basic staircase unit with four flats on each floor originally necessitated three separate projections. The centre pair of tenements had 'semi-detached' sculleries, but the two outer ones each had a separate projection, an arrangement necessitated by the need to find a position for a window into the main block. Beyond the sculleries in the most exposed position was the W.C. One can understand the theoretical reasoning behind the arrangement, but the practical solution was ill-conceived (fig. 1).

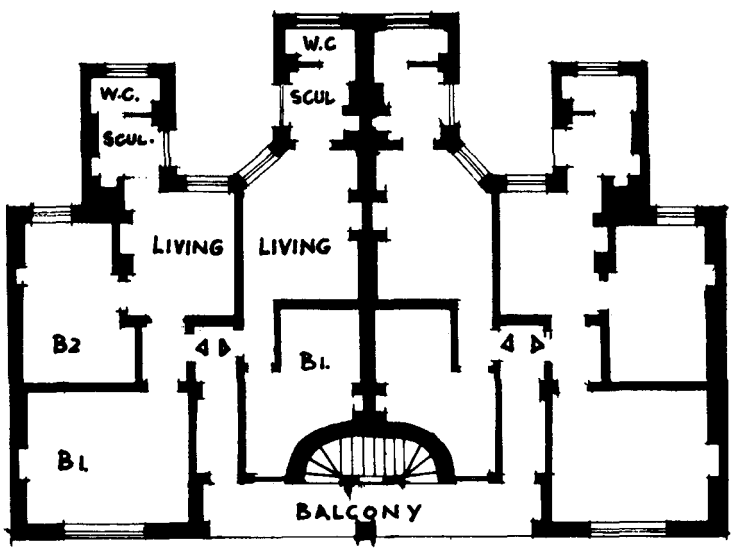

Fig. 1

Cromwell Buildings, Southwark.

The advantages of a completely self-contained flat with an assortment of badly-shaped rooms, often under-lit or looking out between cliffs of brickwork were not, therefore, so considerable by contrast with the simple rectangular rooms of the Peabody Buildings, their view unobstructed by off-shoots and their windows well placed to give maximum light.

The scullery arrangement in the Company's plans was rationalised at Palmerston Buildings, where the number of projecting wings was reduced to two for each staircase unit. Whilst this brought about certain economies of construction, it created new problems of lighting, and from the tenants' point of view it was doubtless less satisfactory, since it made certain of the rooms much darker than in the earlier plan (fig. 2).

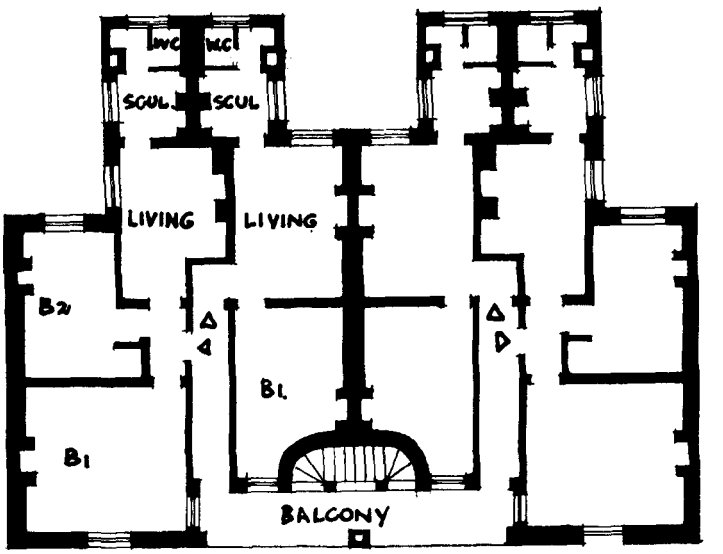

Fig. 2
A Standard Block at Palmerston Buildings.

The Company after 1870

By the end of the sixties economic conditions were once more becoming unfavourable for the housing organisations and without the assistance of government loans, doubtless the collapse of private-enterprise tenement building would already have taken place. The estates at Wapping and Greenwich, two of the most outlying belonging to the Company, had both been adversely affected by trade recessions, one of the hazards of building in areas where land was relatively cheap; and in more central areas, where all the agencies preferred to build because they could always be sure of finding tenants, the value of land was being forced up by railway developments, street improvements and growing commercial investment. The housing agencies were now outpriced on the open market and two Acts of Parliament designed to secure new housing in the central areas, the Metropolitan Street Improvement Act of 1872 and the Artisans' Dwellings Act of 1875, both had the reverse effect.[18]

Waterlow's Company was fortunate in possessing the site in Bethnal Green, where building could be carried on when other sites were not available; also they were able to obtain land from the Marquis of Westminster at a reasonable price.

The Marquis sold two sites which were used early in the decade. The first was in Ebury Street, Pimlico, and contrary to its normal practice the Company put the scheme out to tender, much to the disgust of Matthew Allen who refused to submit a price. As a result the Company was obliged to pay more than Allen had charged them in the past for negotiated contracts.[19] The buildings consisted of two splayed blocks at the junction of Ebury Road and Pimlico Road, each five storeys high and planned on the same principles as all the buildings in the past. The only innovation was the introduction of a new kind of 'patent stone' for lintels, stairs and other details, which, it was claimed, would result in a saving of 20 per cent on the total cost. The estate, with a total accommodation for 120 families, included ten shops, and was completed in November 1870:[20]

> The neighbourhood being rather superior to the districts in which the company's tenements had been previously erected, and the Marquis requiring the buildings to be made externally as attractive as possible, the directors had varied their general design of construction by the introduction of large shops with suitable accommodation for the shopkeepers on the ground floor, keeping all the upper stories for small tenements, and had arranged high gable roofs in the fronts next the main streets.

The *Builder* was very complimentary about the design, criticising only the lack of bedroom accommodation—rather more than half the tenements had only one bedroom—and it noted that the walls were plastered and papered, a comment made probably because the Peabody Trustees did not permit wallpaper.[21] Indeed the Company seemed to lay great stress upon these finishing touches, and Waterlow told the half-yearly meeting in August 1870 that the reason why their buildings were more popular than those of the Trustees was because:[22]

> they were less institutional, that the rules were not so strict and binding, and that there was a feeling among the tenants repugnant to the idea that they were the recipients of charity.

There was no evidence that the Peabody buildings were unpopular, but certainly there was an element of charity in the Trustees' policy which rankled with the commercial companies.

The second plot bought from the Marquis was in Flask Lane, Ebury Square: it came into the Company's possession in two stages, the first in 1870 and the second two years later. The buildings which were constructed were totally different from anything which either preceded or followed them, but there was no apparent reason for this change, since we know that Allen was again the builder of the second stage and probably also of the first.[23] The plan consisted of two detached irregular 'U'-shaped blocks facing each other across a courtyard. But the most peculiar feature of the scheme was the choice of an access system consisting of continuous external balconies, approached by a single staircase in each of the buildings. The galleries were arranged on the courtyard side of the site, and because of this it was not possible to have the usual projecting sculleries and lavatories, so these were now planned within the main block. The rooms were better proportioned and despite the overhanging balconies enjoyed more natural light. There was nevertheless a clear resemblance in the planning to the earlier buildings.

The development of the Bethnal Green estate was also in progress, of course, at this time. The Company had taken possession of the 9-acre site on 25th March 1868 and the demolition of the typical East-End cottage property and its replacement with tall block dwellings began at once and continued until 1890. The whole site was used for housing, except for a half-acre plot which was sold in 1873 to the School Board, who opened a new school, greatly adding to the amenity of the area, during the next year. But the most important single event affecting the popularity of the estate was the new Bethnal Green station built at the same time. Before this the Company had experienced difficulty in letting tenements in some of the early blocks, and it had come to the conclusion that perhaps it had already overbuilt.[24] With the improved railway connection there were no such difficulties in the future and the demand for accommodation kept pace with the continuous building programme.

The first tenements were ready in 1869 and by the end of the following year there were homes for 72 families, mostly in two-roomed flats of an entirely new pattern. During the following two years a further 130 were built on the same plan. At this stage demand slackened and building slowed down: only 30 tenements were completed in 1873 and 60 the next year. These were built by direct labour, an arrangement which seems to have worked well, and to have greatly reduced the cost of building. By this time, however, the effect of the new station was being felt and the pace quickened; 150 tenements were started on the direct labour system.[25]

During 1875 work commenced on one of the largest single sections of the estate, Finnis Street, consisting of fifteen joined blocks on one side and on the other, next to the board school site, a further six, housing altogether 210 families. The blocks were all five storeys high, rising 53ft. on either side of a street only 45ft. wide. The second major addition, consisting of twelve blocks for 295 families, was started in 1878. However, it was not until August 1883 that the estate was nearing completion, and in this, the Company's largest single development, Waterlow noted that it took 'peculiar pleasure'.[26]

Bethnal Green was the first estate where the Company had the opportunity to plan the site as an integrated development. But while the Peabody Trustees would have used a perimeter technique with perhaps a few internal detached blocks, the Company retained its emphasis upon linear planning. Since the site was outside the central area and the reasons for high-density development therefore less cogent, it was disappointing to find the original street network retained, and quite narrow roads lined with towering cliffs of continuous building, very much as in the earliest estates where there was no alternative because the sites were so small. The only break was provided by the school and its playground; it was a relief that the Company agreed to sell even so small a portion of their land.

Development had commenced in Wilmot Street and Ainsley Street; and the first blocks were built on a new, less conventional plan, which made some attempt to minimise the overall height by either dropping the ground floor below the natural ground level or treating the top floor as an attic, with dormer windows set in the roof. Wilmot Street was completed in a rather heavier and less satisfactory style since the Company had reverted to straightforward five-storey blocks although the planning was again unusual and there were no front balconies. The big development which followed in Finnis Street (fig. 3) closely resembled in design a contemporary development elsewhere in London known as Compton Buildings, but one range possessed a novel elevational solution. Corfield Street, the most monotonous part of the estate, was identical in plan-form to the last group of estates, reverting to the deep rear projection while retaining the internal stair at right angles to the street (fig. 3). The effect everywhere was now of gross over-building and there was a marked tendency in these later

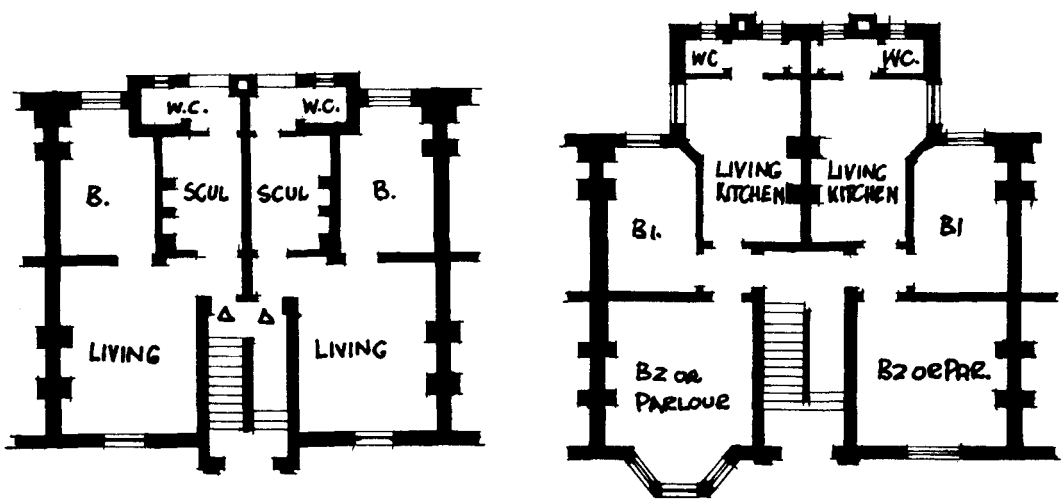

Fig. 3
Small Flats in Finnis Street (*left*) and Corfield Street, Bethnal Green Estate.

stages of the estate's development to increase the density, without paying much attention to the outward appearance of the blocks or the width of the streets. The detailing became coarse, and latterly the ubiquitous bay window was introduced, to add, perhaps, a little interest to the ponderous facades. Gone now was the quality given to the early blocks by the open staircases with their balconies and wrought-iron railings; but the dwellings were more compactly planned and there were more larger flats, although it was often necessary to approach one room through another in order to achieve this degree of compactness (plate 2(b)).

The Later Estates

Work at Bethnal Green kept the Company occupied over a very long period, but it did not represent the total building programme between 1870 and 1890. There was a burst of activity just after 1870 when fresh funds were raised to carry out developments in George Street, Grosvenor Square; Goswell Street, Clerkenwell, and in Crabtree Row. Buildings on all three sites were finished in 1872, and at Clarendon Buildings in George Street—which was a most unusual situation for this kind of housing development—there was a great demand for accommodation, and some 438 applications were received for the 38 flats which were available. The plans used at all these estates were based on the old Palmerston Buildings solution with minor variations to suit the particular exigencies of each site. Leopold Buildings, in Crabtree Row, had a greater proportion of large tenements, achieved by expanding the basic block, although the curved staircase and the front balcony were both retained, and so were the series of projections at the rear (fig. 4). It was a particularly grand development, consisting of one long terrace with blocks of differing heights. They were built of white

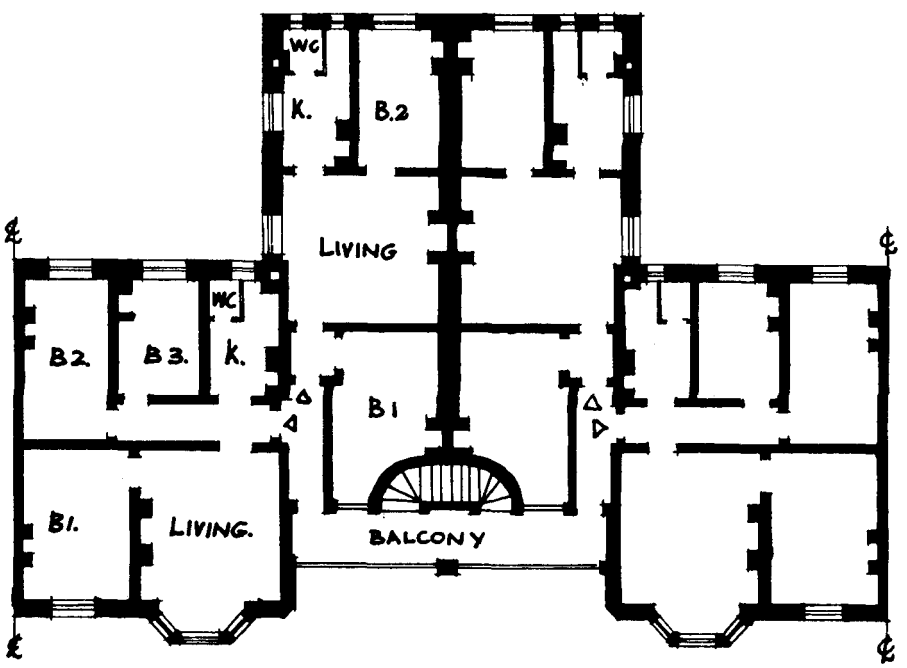

Fig. 4

Larger Flats at Leopold Buildings.

brick and artificial stone, but there was a new sumptuousness in the detailing, enhanced by the use of bay windows, first introduced at Clarendon Buildings and used again here.

More buildings followed on similar variants of the early plan. Morrison Buildings, Commercial Road were completed in 1874, and Lumley Buildings, Pimlico Road, the following year on a site obtained from the Marquis of Westminster. Two plots of land bought from the Ecclesiastical Commissioners were developed. On the first in Coburg Row, Coburg Buildings were constructed; and Cambridge Buildings in Upper Garden Street, Vauxhall Bridge Road, on the second. The plan used for this last scheme abandoned the back projection and the curved stairs which were replaced by straight flights at right angles to the street. The same plan was used at Finnis Street, Bethnal Green. There was also a movement away from the larger flats of Leopold Buildings and a tendency to build more small flats with smaller rooms, although they were better proportioned and the windows more sensibly positioned than in the earlier plan.

It was evident, however, that the Company was dissatisfied with the plans then in use, perhaps because they were all adaptations of a solution evolved when the Company was first formed. Late in 1874 a large site was obtained from the Marquis of Northampton in Goswell Road, behind Compton Buildings, and it was decided to hold a competition for its development. Premiums of £250 and £150 were offered and there were detailed requirements for the site, many of which provide an interesting commentary on housing standards at that time. For example, each tenement had to be self-contained, with its own entrance from the 'external air', and access to the different floors must be by an outside staircase. There were not to be more than five floors, each with a maximum height of 8 ft. 6 ins., and access was to be provided to a flat roof. Tenements of sizes varying from three to five rooms were required, each with a separate lavatory, and shops were to be included on the Goswell Road frontage. The conditions ended by remarking:[27]

> As a moderate return upon the cost of the building must be obtained, economy of construction, combined with strength and durability, will be one of the principal points to be considered in judging the merits of designs.

Charles Barry, Alfred Waterhouse and George Graham, editor of the *Builder*, were appointed to assist the directors in assessing the twenty designs which were submitted, and after the results of the competition had been announced just before Christmas 1874, the drawings were exhibited at the Mansion House. The first premium went to Henry Macauley of Kingston-on-Thames, and the second to Banister Fletcher of London, but neither design was considered suitable for the Company to build because, it was claimed, both would be too expensive. *The Times* devoted an editorial on Christmas Day to the subject; why, it asked, had premiums been awarded when no scheme had been judged suitable for building? Was this because the conditions were insufficiently precise, or alternatively had the assessors too readily condoned failure to comply with them? The editorial then discussed the general implications of the competition, and dwelt at length upon the importance of treating housing as a commercial enterprise if the magnitude of the problem was not to defeat its solution:[28]

> We do ask that the money to be spent in providing improved dwelling-houses shall be laid out as remuneratively as possible, simply because we are convinced that we have in this the best security that it will be forthcoming in sufficient quantities.

Finally the editor tartly proclaimed the incompetence of the architectural profession:[29]

> We could wish that the ingenious gentlemen who have lately sent in their designs for the erection of new houses on the Goswell-road estate had given us better reasons to believe that the profession of

which they are members was at all aware of the absolute vital importance of the condition which they have been so generously pardoned for disregarding.

The faults were not entirely those of the architects involved however, and one architect who was not involved in the competition wrote to *The Times* in defence of the profession, pointing out that the competition system had many evils which did not always encourage the best members of the profession to enter. Many architects, he claimed, including the assessors, were perfectly competent to carry out the instructions of the Company. The winning design was subsequently published in the *Builder* and this, too, had a competent plan.[30]

Waterlow himself wrote to *The Times* defending the Company's decision to award the premiums: £400 was a small sum, he thought, to have the assurance that the blocks which they themselves had previously designed were as economical as any submitted in the competition. In addition, they had learnt much from the various designs about internal detailed planning.[31] There, as far as the Company was concerned, the matter rested, but one further rather comic scene remained, for the authorship of the second premiated design was contested by a Mr. Butler. The case was not at all clear and Butler was eventually refused an order restraining Fletcher.

The buildings finally erected in Goswell Road were designed in the Company's own offices and were completed in 1877. They housed 285 families, and followed exactly the plan of the revised wing of Cambridge Buildings. All the tenements were self-contained, the majority with two bedrooms, but a few with only one. The triangular site lay behind the original Compton Buildings, and, just as at Bethnal Green, the Company resorted to the use of simple parallel rows of building, failing to take any advantage of the possibilities of the site.

There was evidence in these tight layouts of the economic pressures which were again developing between 1875 and 1880, as yet another crisis faced the housing movement. This had been brought about by the ever-increasing scarcity of land, and the failure of the government to take steps which would assist in its provision at the right price and in places where it was most needed. In 1875 the Company also found it necessary to raise additional capital, because the heavy building programme in which it had been engaged had exhausted its previous funds. Doubtless this also contributed to the desire that new ventures should make at least the same return on the money invested as those in the past, despite the increasingly difficult economic situation.

The next group of sites, therefore, were developed using a new plan which permitted an increased density by narrowing the frontage of each flat, increasing the overall depth of the block and resorting once again to the back off-shoot. The actual disposition of the blocks was also tighter than ever before, and their appearance very often grim and forbidding.

There were four more estates built during the decade, following the completion of Compton Buildings in 1877; three were situated in south-west London, in Artillery Row, Chelsea Bridge Road and Ebury Bridge Road; and the fourth to the north, in Highbury Station Road. Wellington Buildings, Artillery Row, built in 1879, is perhaps a good example of the effect of the increasing pressures upon the Company. The blocks were so closely spaced that it was necessary to use a white glazed brick for the lower floors in order to obtain even a reasonable degree of natural lighting.

During 1879 the Company advertised for a Surveyor, and out of the many applicants they appointed Henry Jarvis. His influence upon the later estates was marked, and there was considerable improvement in the layouts adopted as well as in the design of the individual buildings. Because of the difficulty in finding suitably priced land in central areas most of the

sites which the Company purchased on the open market were situated in outlying districts where the prices were more in keeping with the kind of development which was proposed; these included parts of Hackney, Deptford, Walworth and along the Old Kent Road. During 1880 and 1881 estates were built in all these places. The contrast in general appearance between, for example, Kingsley and Waleran Buildings erected in the Old Kent Road during 1881 and any of the previous group of estates was very marked, showing clearly the influence of a new man. The blocks were arranged around courts which provided open spaces away from the street; and in the following year, when Dover Buildings were completed in the same road, the Company adopted the Peabody Donation Fund's practice of arranging the entrances to all the buildings from the courtyard side, so that the estate was a private entity. The internal planning of the buildings was also considerably modified, and again shorn of the ubiquitous back projections, which also improved the external appearance of these estates (fig. 5).

Several sites were obtained in other ways which permitted development in more central areas to continue. A small plot was purchased under the terms of the 1872 Street Improvements Act, after years of delay, and on it, in 1882, Hamilton Buildings were constructed in Great Eastern Street. Three sites were obtained from the Metropolitan Board as a result of clearance schemes under the 1875 Artisans' Dwellings Act. On the first, in Islington, Torrens Buildings were built in 1884; Miles Buildings, Penfold Street were opened the following year, but delay in obtaining the Board's planning consent prevented the completion of Douglas Buildings, on the Mint Street clearance area now known as Marshalsea Road, until 1887.

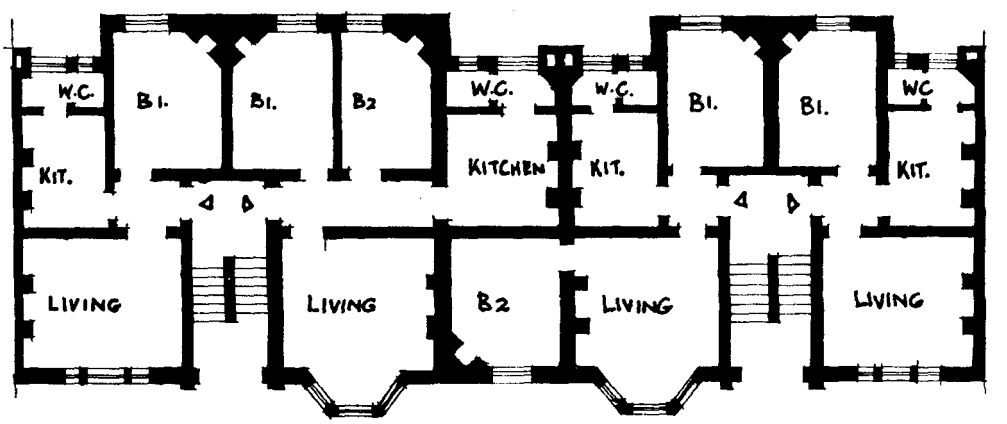

Fig. 5

Two Staircase Units at Dover Buildings.

The Company also obtained land on either side of the new Charing Cross Road from the Metropolitan Board of Works. This estate, known as Sandringham Buildings, was finished in 1884. The buildings actually form the street frontage on either side for part of its length, the ground floor providing valuable space for shops, with tenements above. The area behind both frontages was filled with tightly-packed blocks which again point to the difficulties inherent in tenement building even when the land was obtained on favourable terms.

The last major building programme was started once more through the generosity of the Duke of Westminster who had helped before with the provision of cheap land; this was the extension of the Grosvenor estate. The new buildings were more ambitious and ornate in their architectural quality, perhaps partly because they were in a conspicuous position in a prosperous part of London, but it seems evident that the original intention of the Company was no longer the motivating force it had been even a decade previously. Work continued for a while after 1890; the Grosvenor estate was not completed until 1892 and there were two more new estates as well as additional blocks at two others. But improved industrial dwellings were no longer either so easy to build and finance or so much a matter of popular public concern. It is true that there were new philanthropic ventures at this time, but small-scale investment in a company such as this was no longer common, and significantly the newly established London County Council was starting to build its first council estates. These were eventually to replace the work of the private company and trust as the main source of working-class housing in the next century.

So the work of Waterlow's company was nearly over; in 1892 it was noted in the annual report that the demand in south and east London was nearly satiated—indeed during previous years it again had been increasingly difficult to let the more outlying properties—while in central London, where the demand still existed, there was no available land. Finally, at the annual meeting in 1894 Waterlow told the assembled company that the work they had set out to achieve was accomplished; and while in retrospect we might think this a complacent attitude when so many of the poor still lived in squalor, it must be remembered that the original intention of Waterlow had been to prove that dwellings could be built cheaply. He had manifestly succeeded in this purpose and had founded a company which provided, for that time, a considerable quantity of property. A younger generation filled with the gentle socialism of Howard were eager to look for new solutions in a society which was moving very rapidly towards the twentieth century. The contribution of Waterlow and the Improved Industrial Dwellings Company was, in reality, part of a distant society, probably just a little out of step in the last decade of Victoria's reign. But one should not, for this reason, dismiss the social and humanitarian benefits which these rather clumsy and grim buildings conferred upon the artisans of a city where was epitomised the growth of communal responsibility during the second half of the nineteenth century.

ACKNOWLEDGEMENT

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NOTES

1 T. Dunhill, 'Homes of the London Poor', *Labourers' Friend*, February 1848, p. 26. There are also accounts of the conditions under which the poor lived in many of the 'social' novels of the period by Dickens, Disraeli, Mrs. Gaskell and Kingsley.
2 For an outline account of the early model-dwellings movement see N. Pevsner, 'Model Houses for the Labouring Classes', *Architectural Review*, May 1943.
3 After the Great Exhibition they were taken down and re-erected in Kennington Park, where they may still be seen.
4 Letter of George Peabody, dated 12 March 1862, to the newly appointed Trustees of the Peabody Donation Fund.
5 The only biography of Waterlow was published some three years after his death: G. Smalley, *The Life of Sir Sydney H. Waterlow* (London) 1909.
6 See *Royal Commission on the Housing of the Working Classes*, 1885, Vol. II, p. 427.
7 *Builder*, Vol. XXI (21 March 1863), p. 198.

8 *Times*, 14 April 1863.
9 *Builder*, Vol. XXI (6 June 1863), p. 415 and (13 June 1863), p. 429.
10 *Builder*, Vol. XXII (26 March 1864), p. 232.
11 *Times*, 23 July 1866.
12 Quoted by J. Hole, *The Dwellings of the Working Classes* (London), 1866, pp. 57–8.
13 See *Illustrated London News*, Vol. XLVIII (10 March 1866), p. 238.
14 *Royal Commission on the Housing of the Working Classes*, 1885, Vol. II, p. 427.
15 *Select Committee on Artizans' and Labourers' Dwellings*, 1881, p. 176.
16 *Times*, 7 August 1867.
17 *Times*, 31 July 1874. James Moore, the Company's Secretary, informed the Select Committee in 1881 that its total loans had risen to £271,000 (p. 172).
18 The evidence for this is best seen in the proceedings of the two parliamentary investigations into Housing, the Select Committee of 1881–2 and the Royal Commission of 1884–5.
19 *Builder*, Vol. XXVII (21 August 1863), p. 675.
20 *Times*, 11 August 1869.
21 *Builder*, Vol. XXVIII (3 December 1870), p. 963.
22 *Times*, 13 August 1870.
23 *Builder*, Vol. XXX (31 August 1872), p. 682.
24 *Times*, 12 February 1874.
25 *Ibid.*
26 *Times*, 15 August 1883.
27 *Times*, 1 June 1874.
28 *Times*, 25 December 1874.
29 *Ibid.*
30 *Builder*, Vol. XXXII (26 December 1874), p. 1074 and Vol. XXXIII (2 January 1875), p. 2.
31 *Times*, 28 December 1874.