



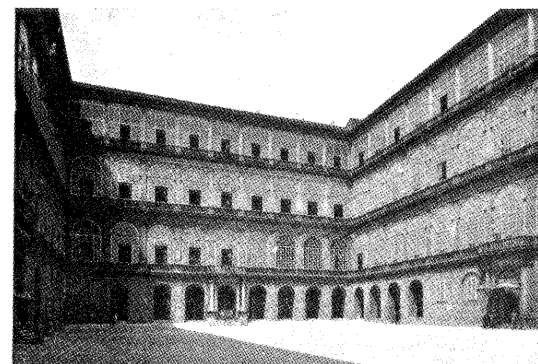
THE TELEPHONE BUILDING, NEW YORK

TOWARDS A NEW ARCHITECTURE

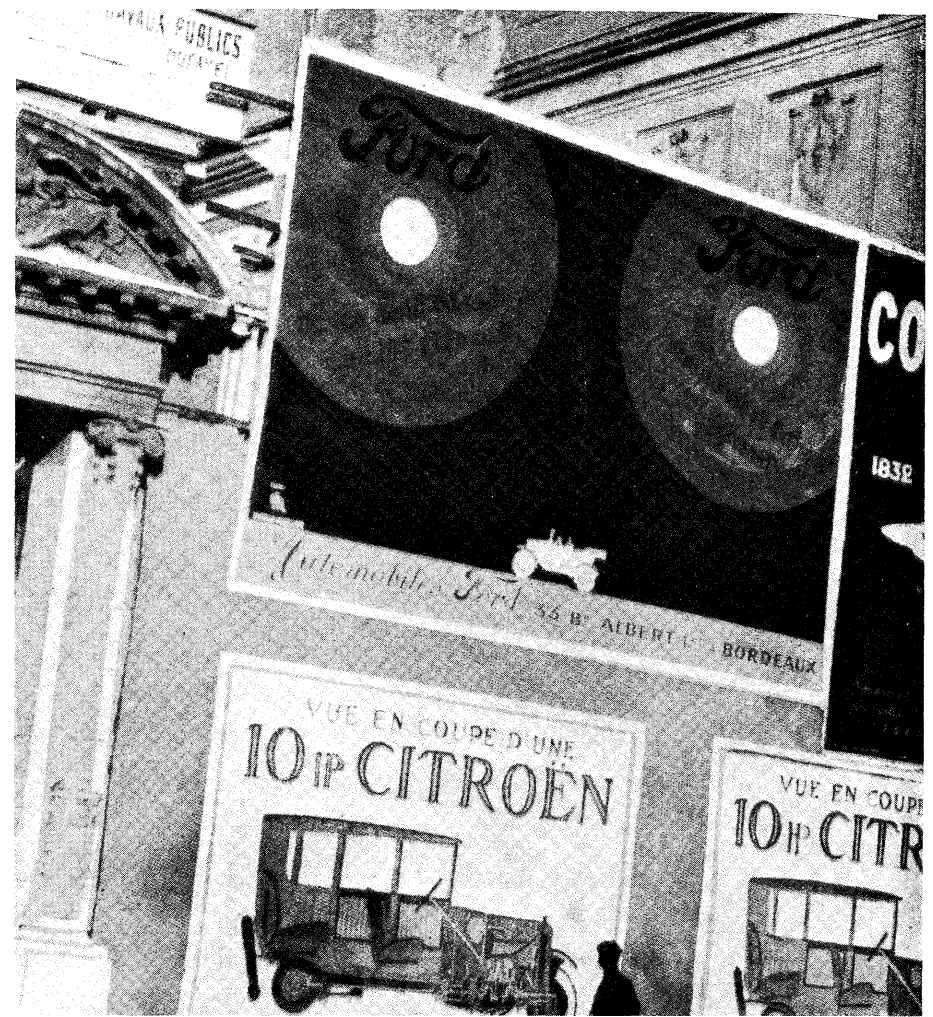
by
LE CORBUSIER

*Translated from the thirteenth French edition
and with an Introduction by*

FREDERICK ETHELLS



DOVER PUBLICATIONS, INC.
New York



MASS-PRODUCTION
HOUSES

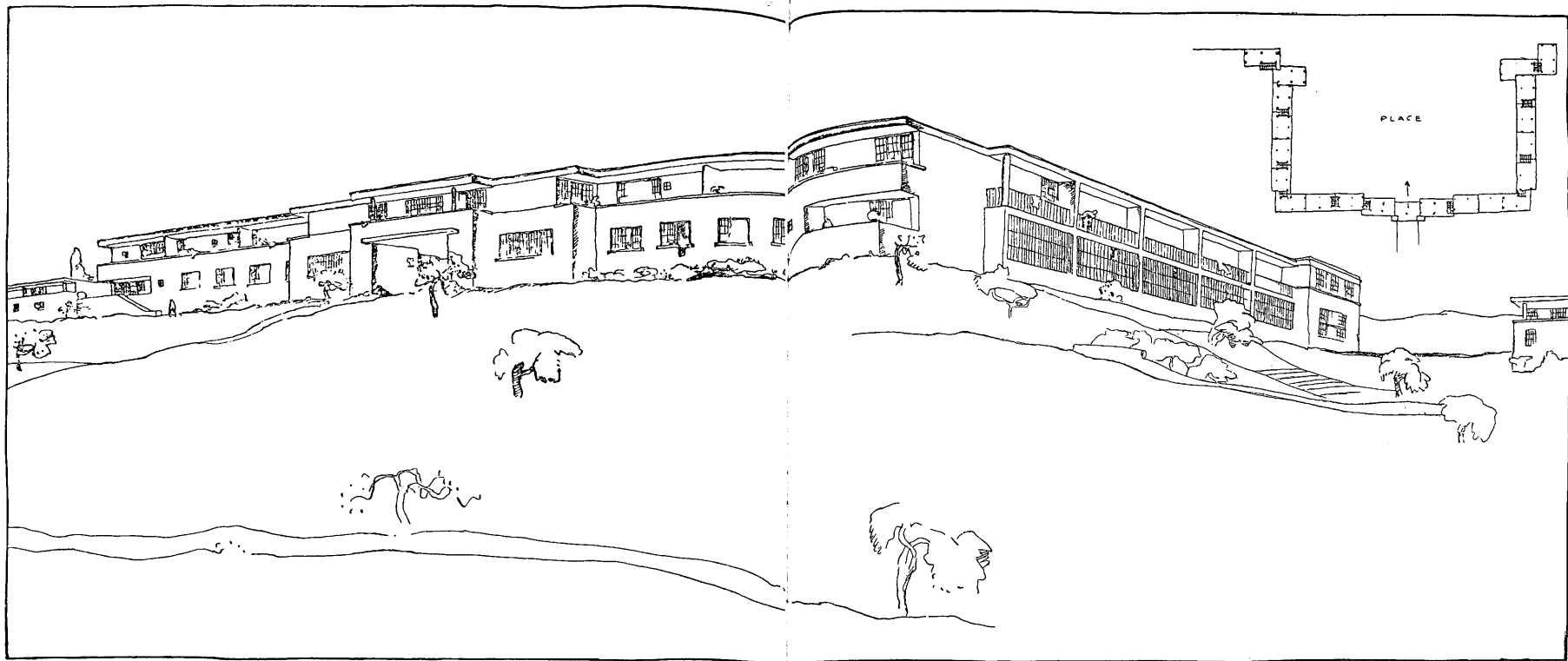
THE programme demanded in France by MM. Loucheur and Bonnevey was for a law authorizing the construction of 500,000 dwellings to be built well and cheaply. This was an exceptional event in the annals of construction and required exceptional means and methods.

Now, it was necessary to start from the very beginning ; nothing being ready for the realization of such an immense programme. *The right state of mind does not exist.*

The state of mind for mass-production houses, the state of mind for living in mass-production houses, the state of mind for conceiving mass-production houses.

Everything must be begun from the beginning, nothing is ready. Specialization has hardly touched the domain of the dwelling-house. There are neither the workshops nor the technical specialists.

But at any moment, if once the mass-production spirit came to life, everything would quickly be begun. In fact, in every branch of building, Industry, as formidable as a natural force and overrunning everything like a flood that rolls on to its destined end, tends more and more to transform natural raw materials and to produce what we call "new materials." They are legion : cements and limes, steel girders, sanitary fittings, insulating materials, piping, ironmongery, water-proofing compositions, etc., etc. All this stuff is dumped in bulk into buildings in course of construction, and is worked into the job on the spot ; this involves enormous costs in labour and leads

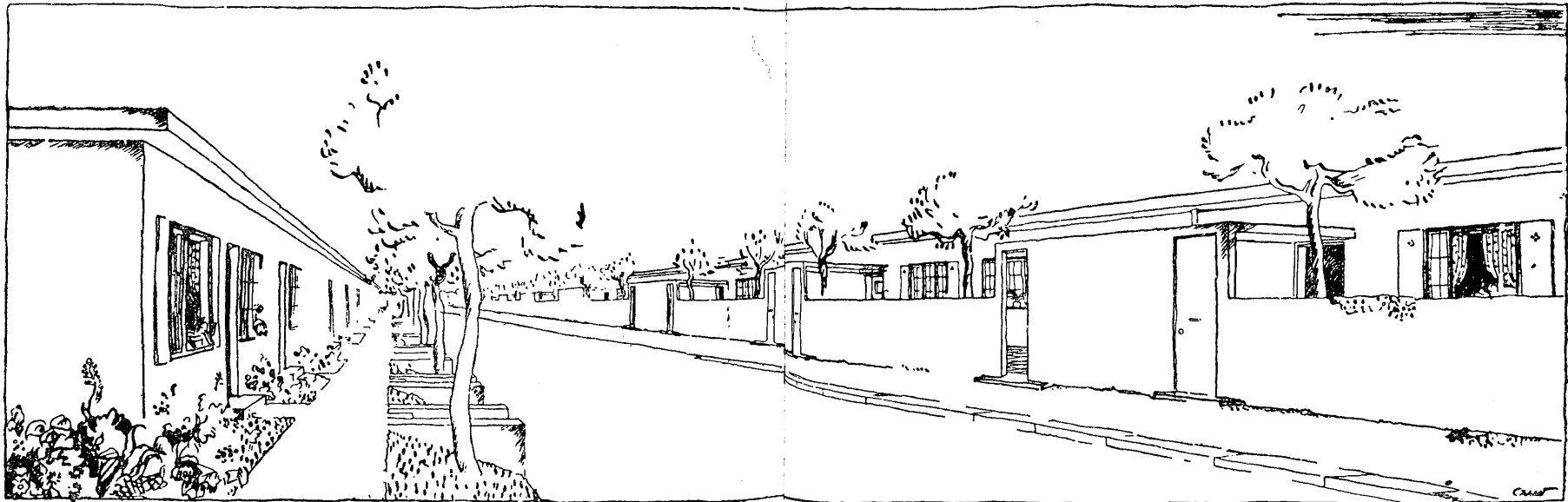


LE CORBUSIER, 1915. A GROUP OF MASS-PRO-

The walls and partitions were a light filling of bricks, breeze slabs and so on, capable of being erected by unskilled labour. The height of two slabs was arranged to unit of measurement. Contrary to normal practice, the woodwork (mass-produced) internal partitions; both walls and partitions were worked round the woodwork, that remained was to install the pipes for the various services.

DUCTION HOUSES IN REINFORCED CONCRETE

The concrete was poured in from above as you would fill a bottle. A house can be shooks our contemporary architects, who cannot believe in a house that is made in darmers and mansards



LE CORBUSIER, 1920.

The concrete was poured in from above as you would fill a bottle. A house can be shooks our contemporary architects, who cannot believe in a house that is made in darmers and mansards

CONCRETE HOUSES

completed in three days. It comes out from the shuttering like a casting. But this three days; we must take a year to build it, and we must have pointed roofs,



to half-and-half solutions. The reason is that the various objects have not been standardized. As the necessary state of mind does not exist, attention has never been given to the serious study of the various units, and still less to that of the construction itself; the mass-production state of mind is hateful to architects and to the ordinary man (by infection and persuasion).

The prime consequences of the industrial evolution in "building" show themselves in this first stage; the replacing of natural materials by artificial ones, of heterogeneous and doubtful materials by homogeneous and artificial ones (tried and proved in the laboratory) and by products of fixed composition. Natural materials, which are infinitely variable in composition, must be replaced by fixed ones.

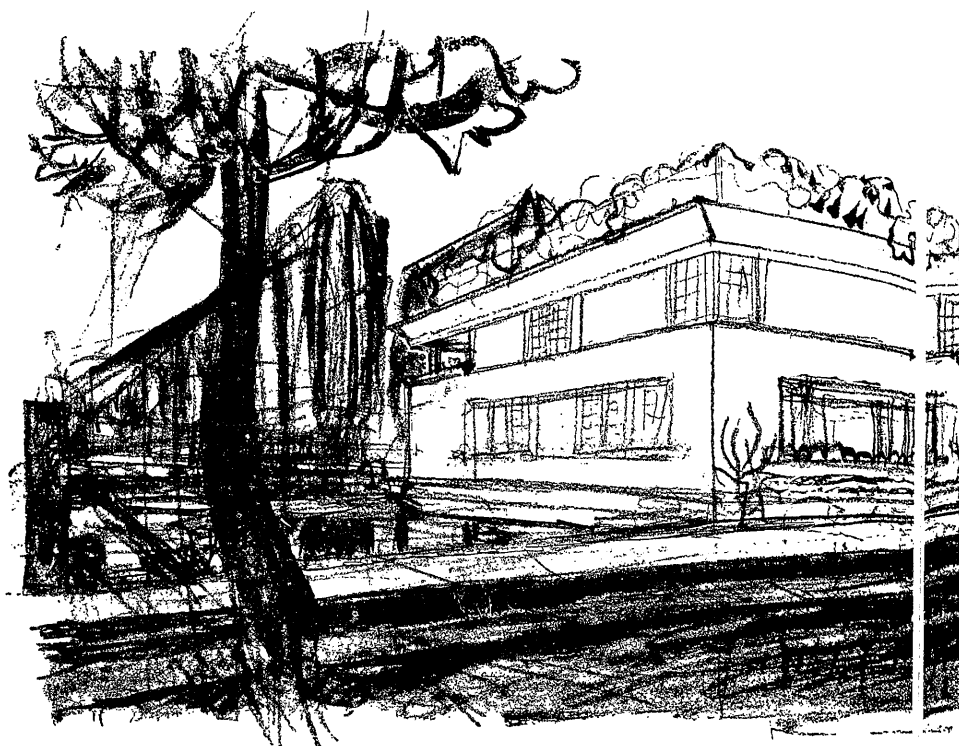
On the other hand the laws of Economics demand their rights: steel girders and, more recently, reinforced concrete, are pure manifestations of calculation, using the material of which they are composed in its entirety and absolutely exactly; whereas in the old-world timber beam there may be lurking some treacherous knot, and the very way in which it is squared up means a heavy loss in material.

Lastly, in certain fields, the technical experts have already spoken. Water supply and lighting services are rapidly being evolved; central heating has begun to take into consideration the structure of walls and windows—surfaces which tend to cooling, for instance—and in consequence stone, the good old material stone, used for walls 3 feet thick or more, is seen to be more than outmatched by light cavity walls in breeze slabs,

and so on. Accepted things so far treated as almost unassailable no longer hold their own: roofs which need no longer be pointed for purposes of throwing off water, the enormous and handsome window-embrasures which annoy us since they imprison the light and deprive us of it; the massive timbers, as thick as you please and heavy for all eternity, but which will still spring and split if placed near a radiator, whilst a patent board $\frac{1}{8}$ inch thick will remain intact. . . .

It was a common thing in the good old days (which still go on, alas!) to see heavy horses drawing enormous stones to the yard, and a mass of human labour unloading them, cutting and dressing them, hoisting them on to the scaffolding, placing them in position and, rule in hand, making lengthy adjustments to every face; such buildings might take two years to construct: to-day a building can be erected in a few months; the P.O. have recently finished their immense Cold Storage building at Tolbiac. The materials used are confined to grains of sand and coke-breeze the size of small nuts; the walls are thin like membranes; but enormous consignments are stored in this building. Thin walls to give protection against differences of temperature, and partitions 3 to 4 inches thick in spite of the enormous loads stored there. Things have indeed altered!

The difficulties of transport are at their height: it is clear that houses represent an immense tonnage. If this were reduced four-fifths, that would indeed be up-to-date! The war has shaken us all up. Contractors have bought new plant, ingenious, patient and rapid. Will the yard soon be a factory? There is talk of houses made in a mould by pouring in liquid



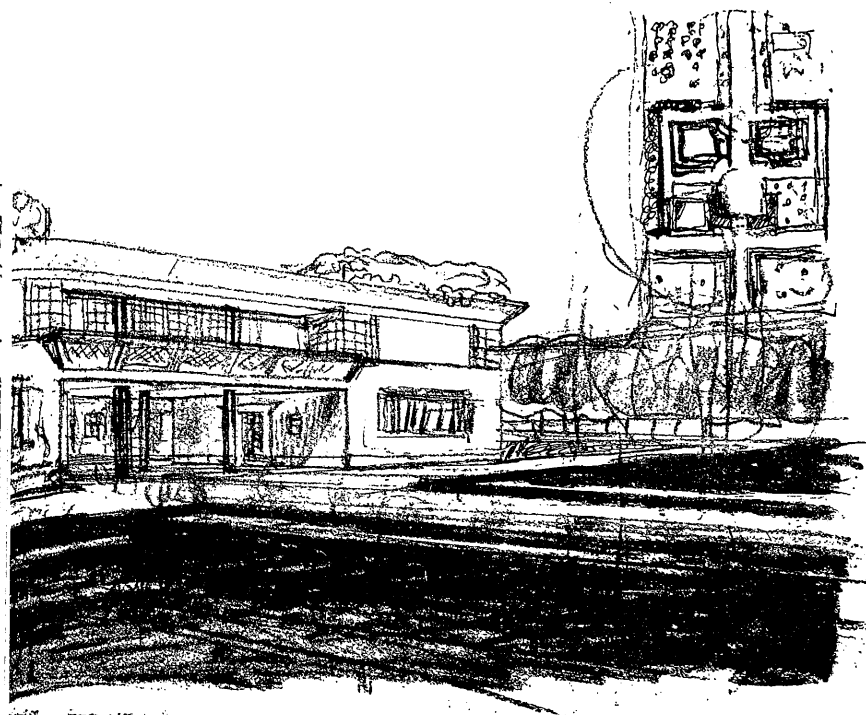
LE CORBUSIER, 1915. HOUSE

The constructional method is here applied to a middle-class house, at the same of the method employed permit of a large and rhythmical arrangement and make principle shows its true value : some sort of link between the rich man's house



concrete from above, completed in one day as you would fill a bottle.

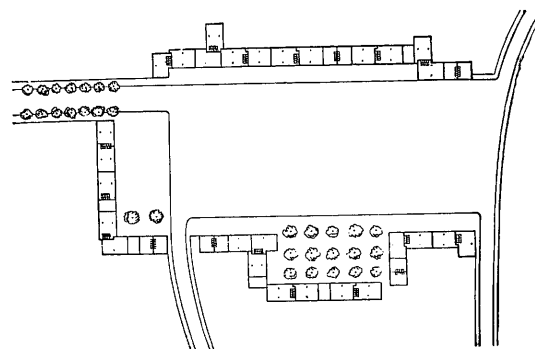
One thing leads to another, and as so many cannons, air-planes, lorries and wagons had been made in factories, someone asked the question : "Why not make houses ?" There you have a state of mind really belonging to our epoch. Nothing is



IN REINFORCED CONCRETE

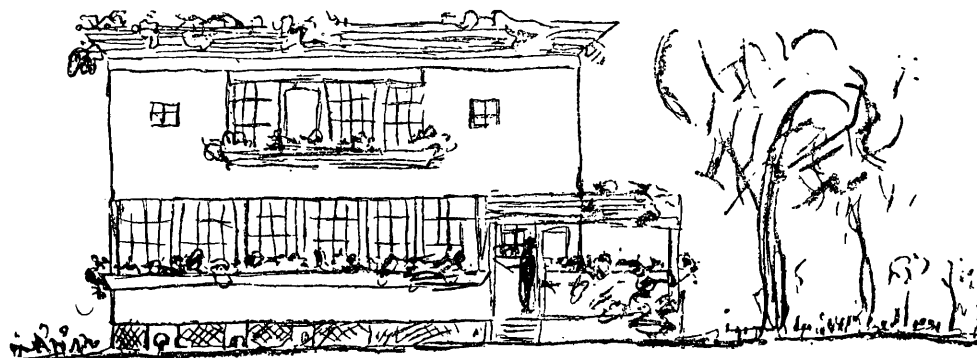
rate per foot cube as a simple workman's house. The architectural resources a real architectural treatment possible. It is here that the mass-production and the poor man's ; and some sort of decency in the rich man's dwelling.

ready, but everything can be done. In the next twenty years, big industry will have co-ordinated its standardized materials, comparable with those of metallurgy ; technical achievement will have carried heating and lighting and methods of rational construction far beyond anything we are acquainted with. Contractors' yards will no longer be sporadic dumps in which



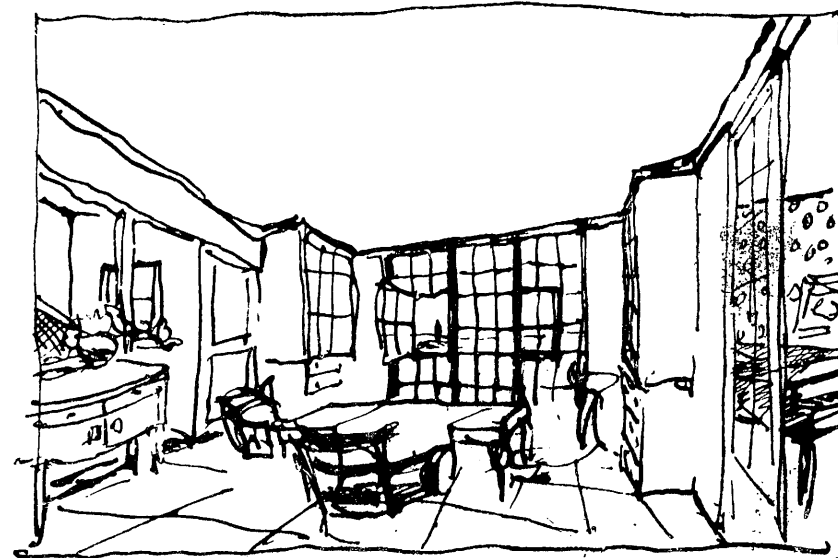
PLAN OF HOUSING SCHEME IN REINFORCED CONCRETE

everything breathes confusion; financial and social organization, using concerted and forceful methods, will be able to solve the housing question, and the yards will be on a huge scale, run and exploited like government offices. Dwellings, urban and suburban, will be enormous and square-built and no longer a dismal congeries; they will incorporate the principle of mass-production and of large-scale industrialization. It is even



HOUSE IN REINFORCED CONCRETE. HOUSE AND WORKSHOP

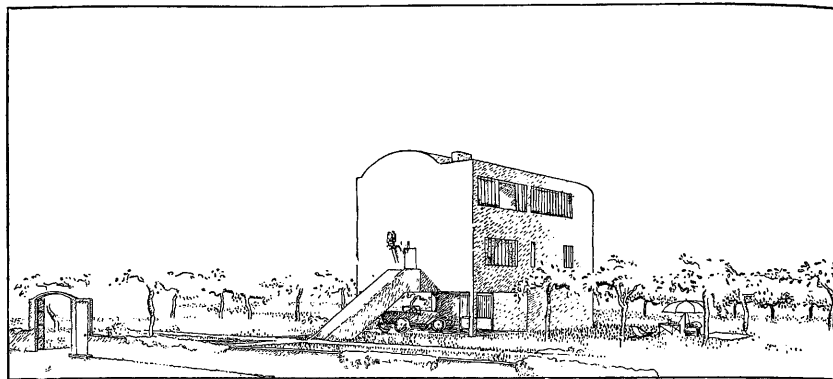
The walls do not carry any weight; the windows go right round the house.



LE CORBUSIER, 1915. INTERIOR OF A REINFORCED CONCRETE HOUSE

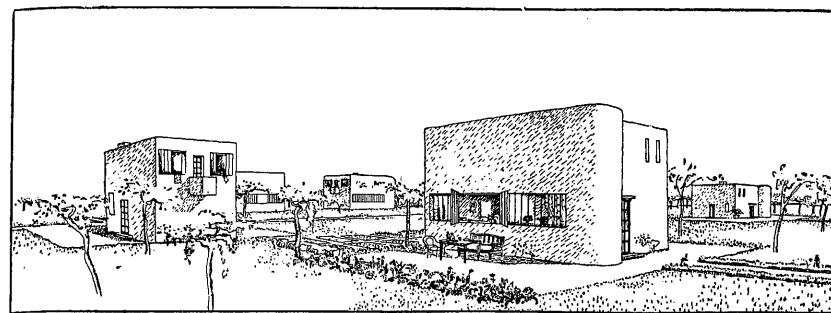
Mass-production doors, windows, cupboards: the windows are built up of one, two, a dozen units: one door with one impost, two doors with two imposts, or two doors without impost, etc.; cupboards glazed above and with drawers below for books, utensils, etc. All these units, which big industry can supply, are based on a common unit of measurement: they can be adapted to one another exactly. The framework of the house being made, these elements are set up in their proper places in the empty shell and temporarily fixed by laths; the voids are filled by plaster slabs, bricks or lathing; the normal method of building is reversed and months of work are saved. A further gain, of the greatest importance, is architectural unity, and by means of the module, or unit of measurement, good proportion is assured automatically.

possible that building "to measure" will cease. An inevitable social evolution will have transformed the relationship between tenant and landlord, will have modified the current conception of the dwelling-house, and our towns will be ordered instead of being chaotic. A house will no longer be this solidly-built thing which sets out to defy time and decay, and which is an expensive luxury by which wealth can be shown; it will be a tool as the motor-car is becoming a tool. The house will no



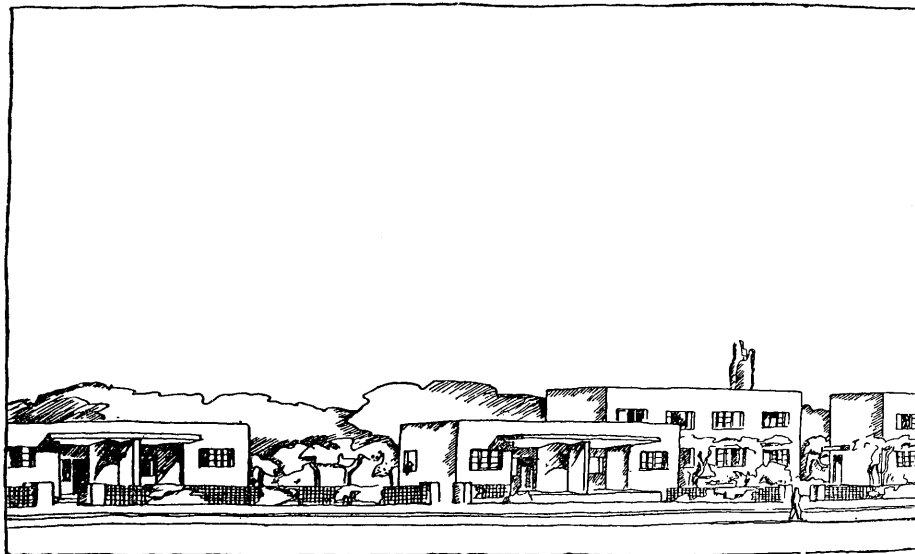
LE CORBUSIER, 1922. ARTIST'S HOUSE

Framework of reinforced concrete with cavity walls, each thickness being about $1\frac{1}{2}$ ". State your problem clearly to yourself: determine the type of house according to the needs required: resolve the problem as those of railway carriages, tools, etc. are resolved.



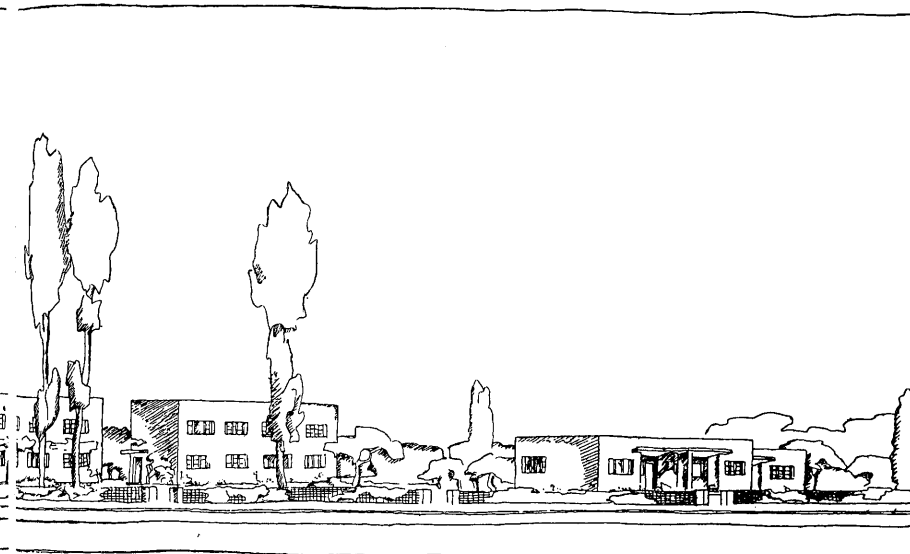
LE CORBUSIER, 1922. MASS-PRODUCTION WORKMEN'S HOUSES

A sensible housing scheme; the same house-unit being used in varied ways. Four concrete piers; "cement-gun" walls. Its æsthetic? Architecture is a plastic, not a romantic, affair.



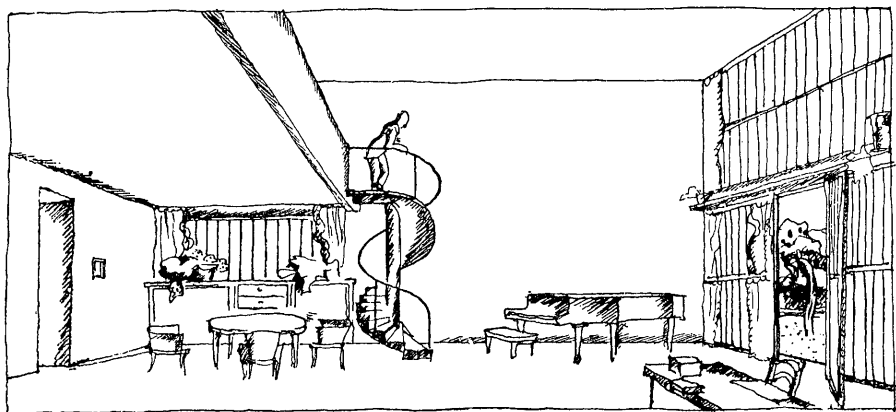
LE CORBUSIER, 1919.

The ground consisted of layers of gravel. A quarry was opened on the site; floors were in reinforced concrete. An æsthetic of its own results from the advantage demands the exclusive employment of straight lines, square-set; We must clear our minds of romantic cobwebs.



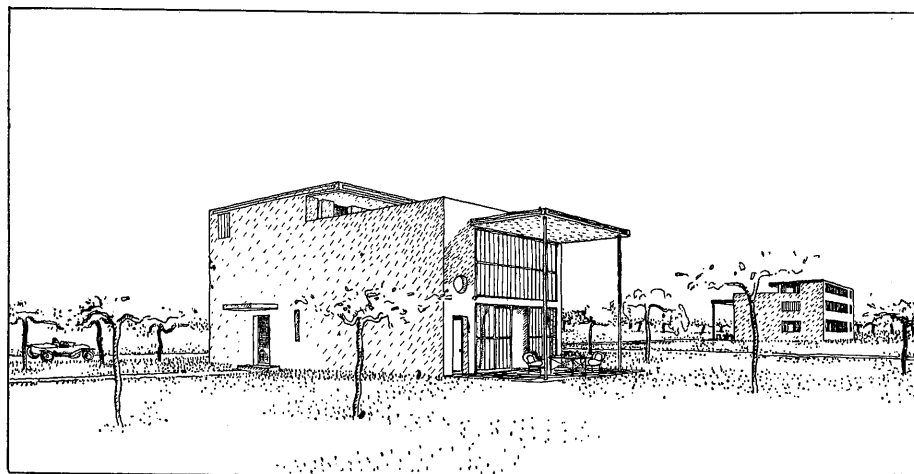
HOUSES OF COARSE CONCRETE

and the gravel was run with lime into a raft 12 inches in thickness; the method employed, and to use the resources of the modern industrial "yard" to this is the grand acquisition of modern architecture, and it is a great gain.



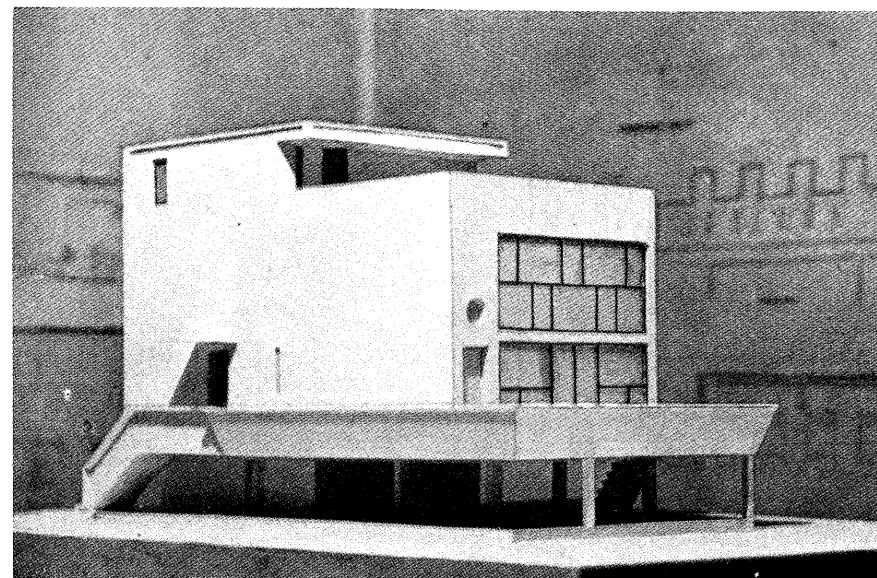
LE CORBUSIER, 1921. MASS-PRODUCTION HOUSE

"Citrohan" (not to say Citroën). That is to say, a house like a motor-car, conceived and carried out like an omnibus or a ship's cabin. The actual needs of the dwelling can be formulated and demand their solution. We must fight against the old-world house, which made a bad use of space. We must look upon the house as a machine for living in or as a tool. When a man starts any particular industry he buys the necessary equipment of tools; when he sets up house he rents, in actual fact, a ridiculous dwelling. Till now a house has consisted of an incoherent grouping of a number of large rooms; in these rooms the space has been both cramped and wasted. To-day, happily, we are not rich enough to carry on these customs, and as it is difficult to get people to look at the problem under its true aspect (machines for living in), it is nearly impossible to build in our towns, with disastrous results. Windows and doors must have their sizes readjusted; railway carriages and saloon-cars have shown that man can pass through smaller openings, and that these can be worked out to the last square inch; it is criminal to make W.C.'s 36 feet square. As the price of building has quadrupled itself, we must reduce the old architectural



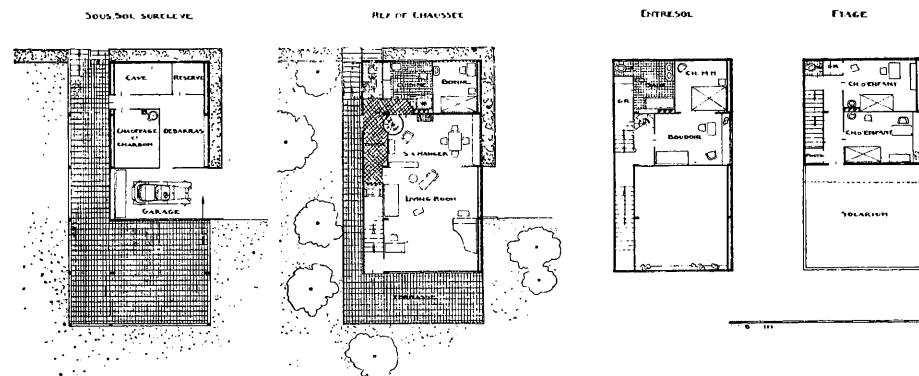
LE CORBUSIER, 1922. MASS-PRODUCTION VILLA

Framework of concrete. A large living-room 30 feet x 16 feet; kitchen, maids' room; bedroom, bathroom, boudoir; two bedrooms and a "solarium."



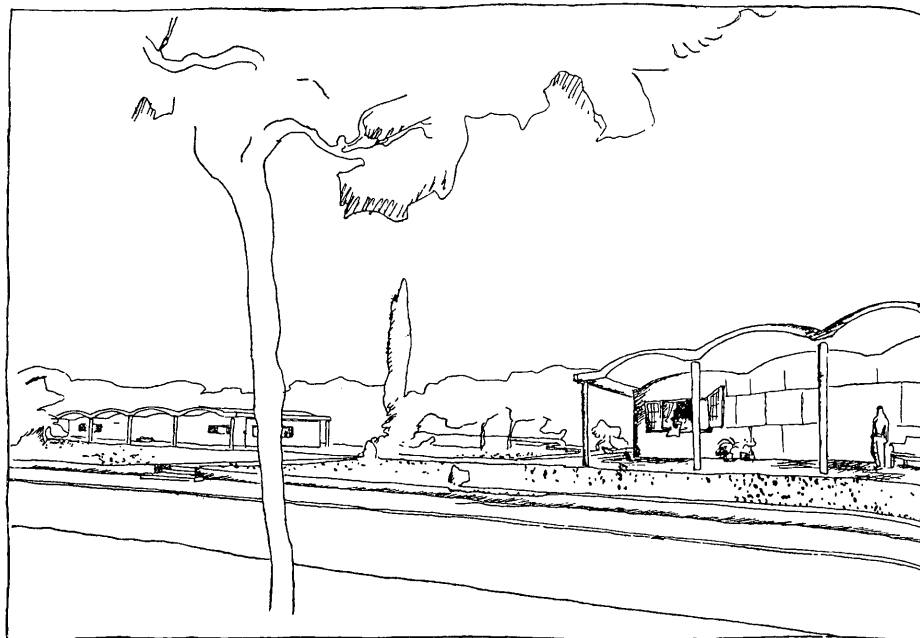
pretensions and the cubage of houses by at least one-half; henceforth the problem is in the hands of the technical expert: we must enlist the discoveries made in industry and change our attitude altogether.

As to beauty, this is always present when you have proportion; and proportion costs the landlord nothing, it is at the charge of the architect! The emotions will not be aroused unless reason is first satisfied, and this comes when calculation is employed. There is no shame in living in a house without a pointed roof, with walls as smooth as sheet iron, with windows like those of factories. And one can be proud of having a house as serviceable as a typewriter.



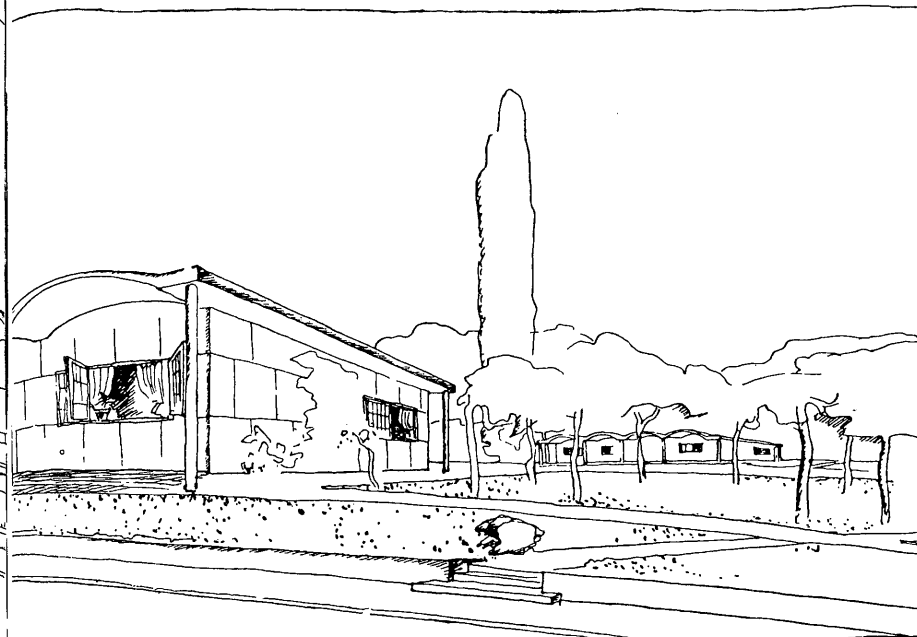
LE CORBUSIER, 1921. A "CITROHAN" HOUSE

Framework of concrete, girders made on the site and raised by a hand-winch. Hollow walls of $1\frac{1}{8}$ " concrete and expanded metal with a $7\frac{1}{2}$ " cavity; all floor slabs on the same unit of measurement; the factory-window frames, with adaptable ventilating, on the same unit. The arrangements in conformity with the running of a household; abundant lighting, all hygienic needs met and servants well cared for.



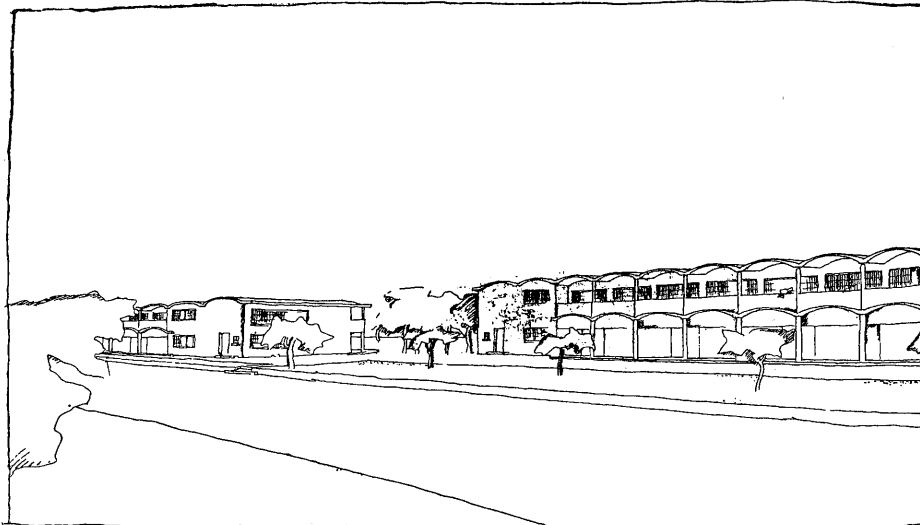
LE CORBUSIER, 1919.

The ordinary house weighs too much and involves the cost of transportation of a factory-made house is needed. The constructional principle is that of casings filled in with rough material, aggregate, rough rubble, etc., found on the site, walls an important insulating quality; ceilings and floors of arched corrugated or so thick. The corrugated sheets remain permanently and form a definitely time as the casings. The house is completed by one class of labour, and the only



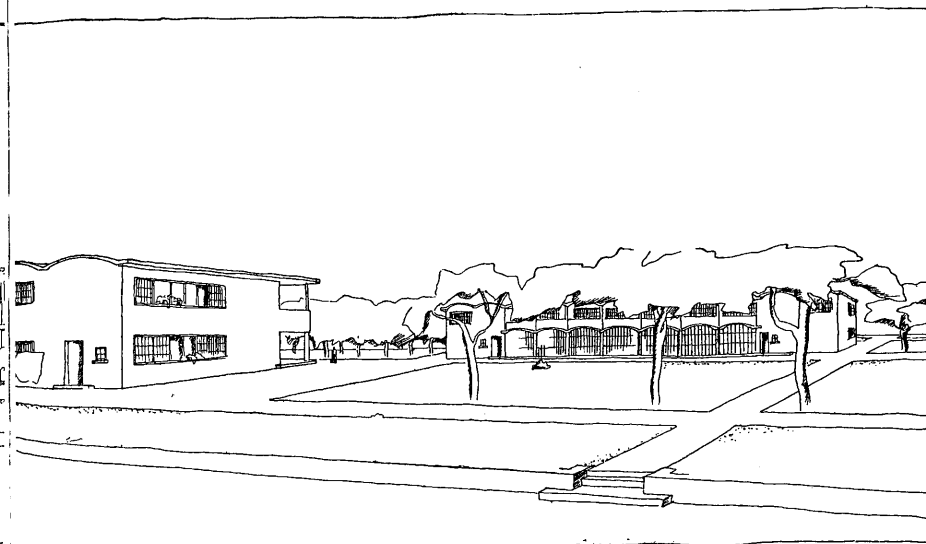
A "MONOL" HOUSE

quantity of material—bricks, woodwork, cement, tiles, timber, etc. The of asbestos sheeting about $\frac{1}{4}$ " thick, forming courses about 3 feet in height, lightly bound with lime mortar, leaving between them cavities which give the asbestos sheets which form a shuttering and receive a coating of concrete an inch insulating layer. The woodwork, windows and doors are adjusted at the same transport needed is that of a double shell of $\frac{1}{4}$ " asbestos sheeting.



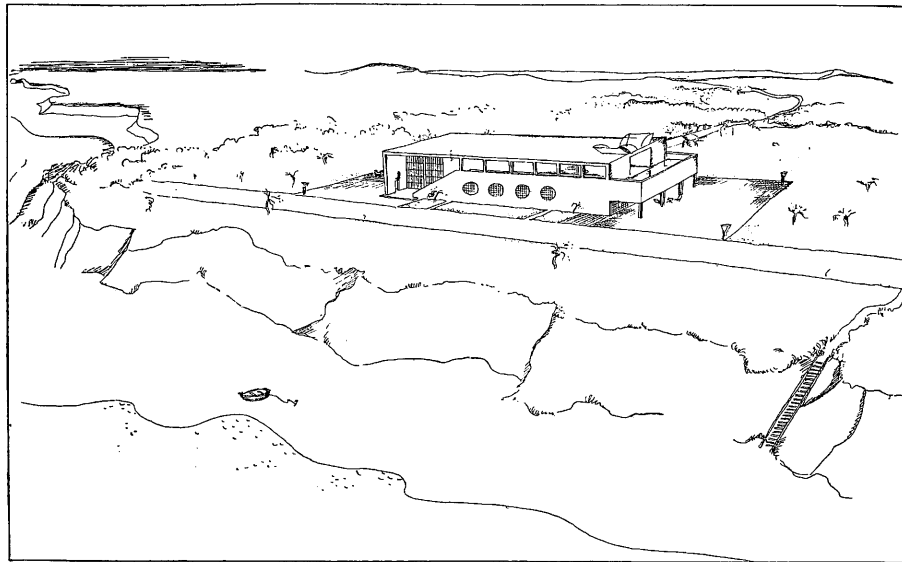
LE CORBUSIER.

When one talks of mass-production houses one means, of course, the "housing-scheme affords the variety necessary for architectural composition and mapped-out scheme, constructed on a mass-production basis, can give a feeling America has given us an example by the elimination of hedges and fences, property which took its rise over there; such suburbs give a great sense of



A "MONOL" BUILDING

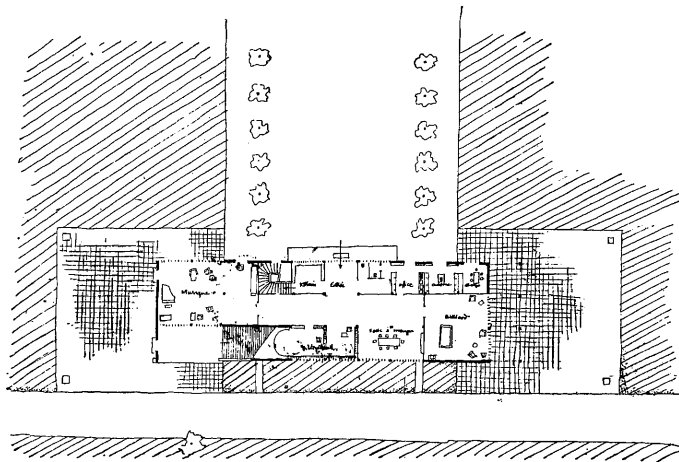
scheme." Unity in the constructional elements is a guarantee of beauty. A lends itself to design on a large scale and to real architectural rhythms. A well-of calm, order and neatness, and inevitably imposes discipline on the inhabitants. rendered possible only by the modern feeling of respect for other people's space; for once hedges and fences are removed, light and sunshine reign over all.



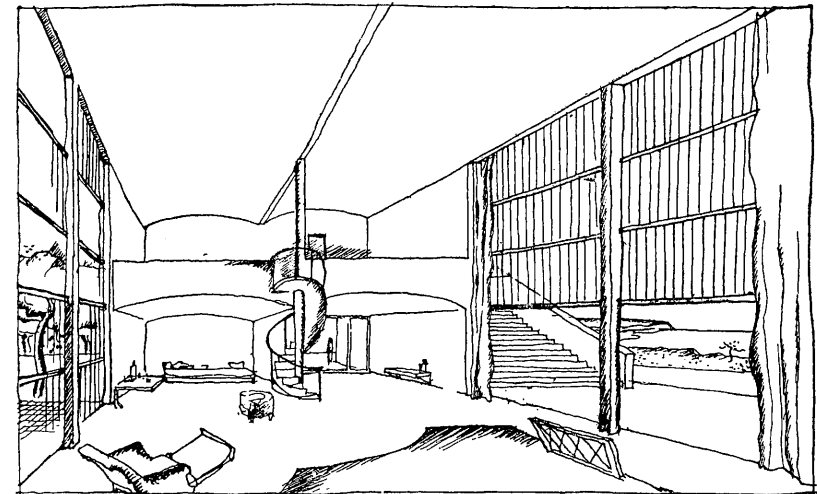
LE CORBUSIER, 1921. A SEASIDE VILLA CONSTRUCTED WITH MASS-PRODUCTION UNITS

Reinforced concrete piers every 16 feet in each direction; slightly vaulted ceilings of reinforced slabs. Within this framework, which is exactly like that of industrial buildings, the plan is arranged as required by means of slender partitions. The net cost is extremely low.

On the æsthetic side there is a gain of the utmost importance in the use of standard units of dimension. The lower cost of such a building, as compared with that of a more complicated form of construction, enables a greater ground area to be covered with a larger building. The lightly constructed walls and partitions can be rearranged at any time and the plan altered at will.

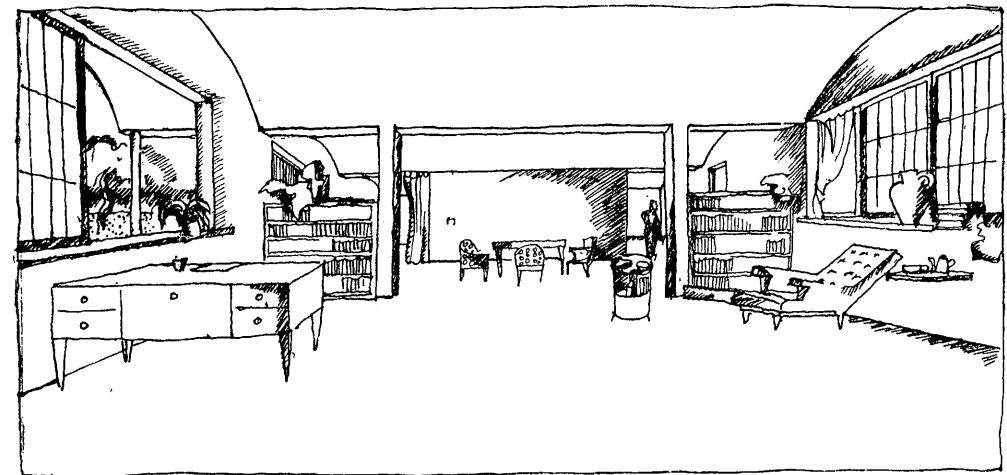


PLAN OF THE VILLA, SHOWING THE PIERS REGULARLY DISPOSED



INTERIOR OF THE SEASIDE VILLA

The concrete piers of uniform section, the flat vaults of the ceilings, the standardized window-units, the solids and the voids make up the architectural elements of the construction.

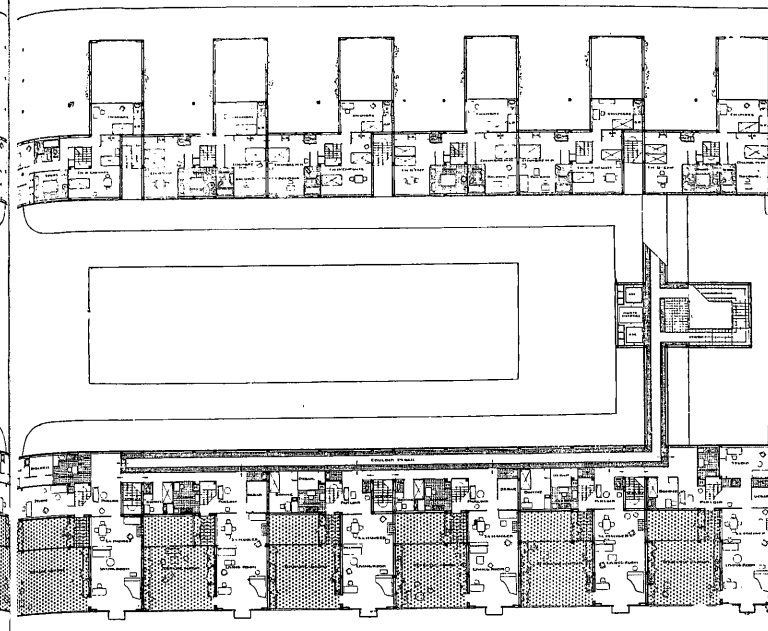
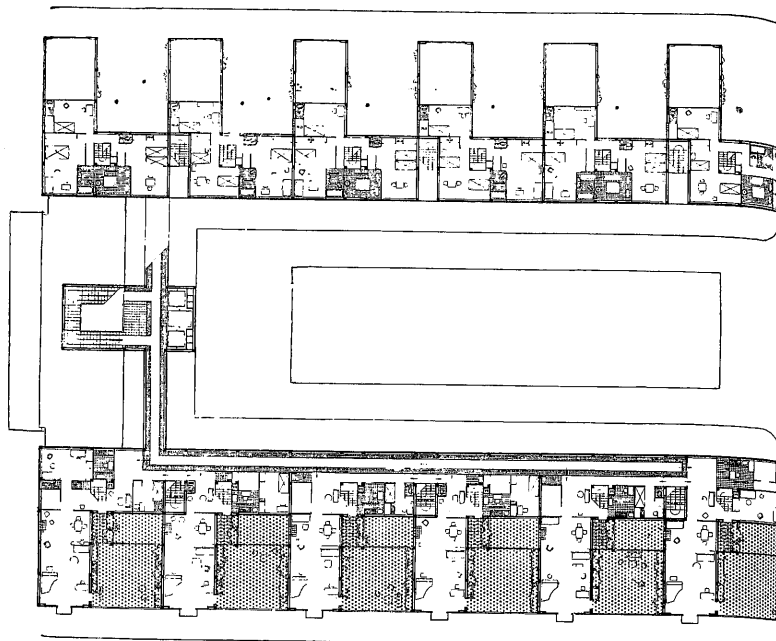


LE CORBUSIER. INTERIOR OF A "MONOL" HOUSE, ARRANGED AS A MIDDLE-CLASS HOME

If cultivated people realized that mass-construction houses can be built of perfect design and proportion, and at less cost than their flat in town, they would at once insist on a better suburban train service, so that a real use might be made of the city's surrounding country-side.

"FREEHOLD
MAISONNETTES"

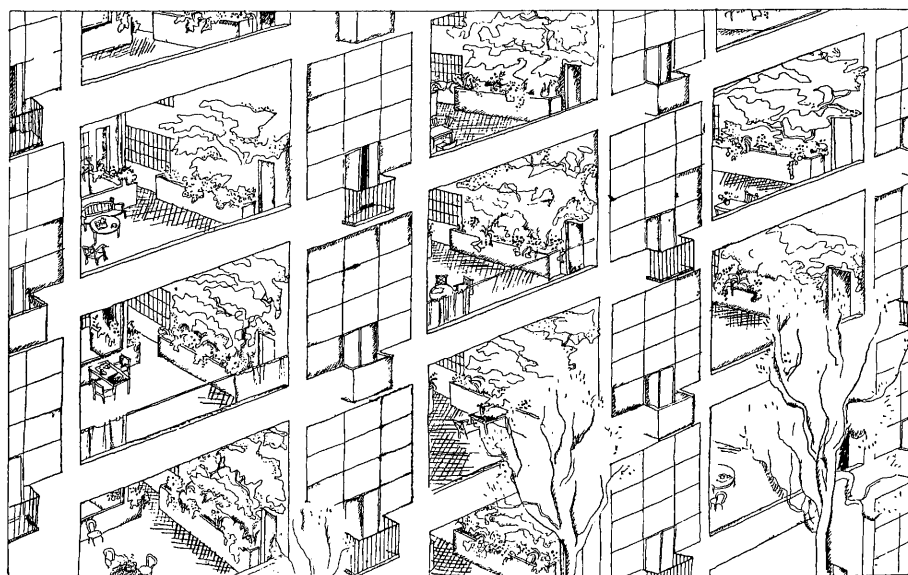
120 maisonnettes in
one block of several
storeys.



Plan of one
storey.

At street level
a great entrance
hall; on other
floors the grand
staircase and the
main corridor.

Ground floor plan :
The shading indi-
cates the hanging
gardens

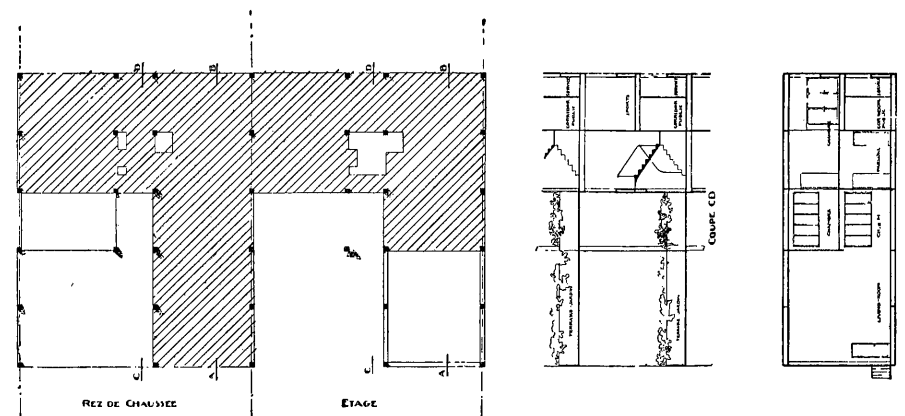


"FREEHOLD MAISONNETTES": THE HANGING GARDENS

Each garden is completely shut off from its neighbour.

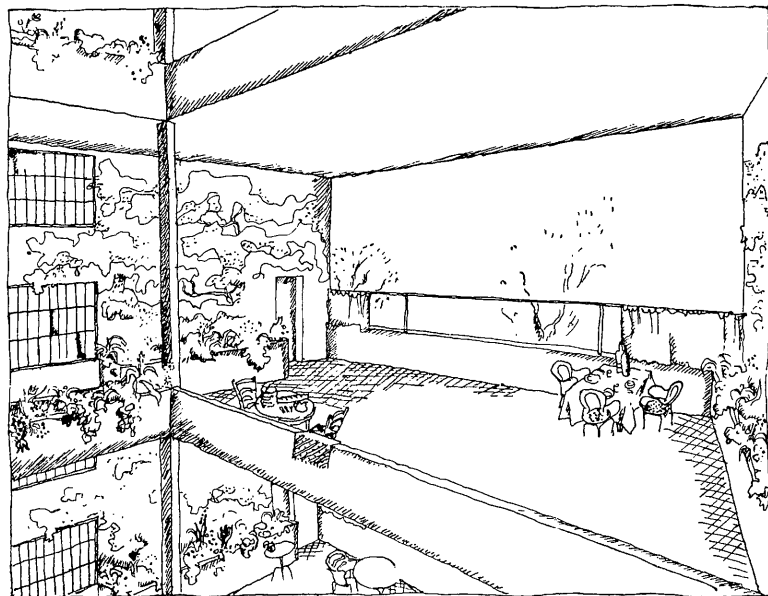
LE CORBUSIER, 1922. A GREAT RENT-PURCHASE SCHEME

The drawings show the arrangement of a group of 100 maisonnettes disposed in five storeys, each maisonnette having two floors and its own garden. A communal service provides for all necessities and provides the solution to the servant question (which is only just beginning and is an inevitable social fact). Modern achievement, applied to so important an enterprise, replaces human labour by the machine and by good organization; constant hot water, central-heating,



"FREEHOLD MAISONNETTES"

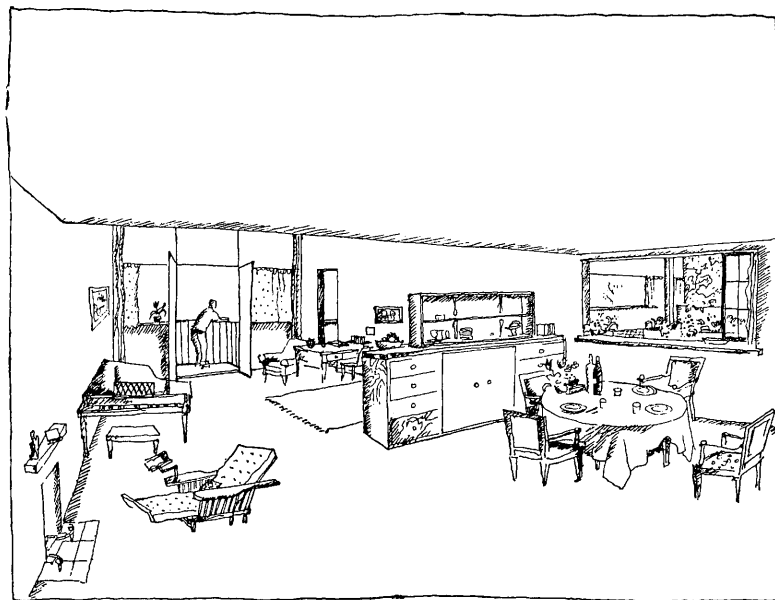
Mass-production construction of concrete piers and slabs. Cavity walls.



"FREEHOLD MAISONNETTES"

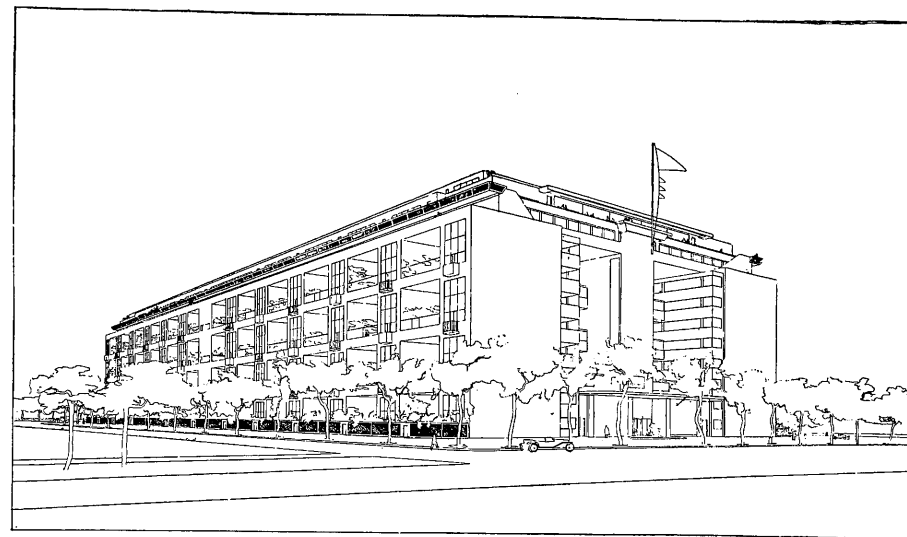
One of the hanging gardens.

refrigerators, vacuum cleaners, pure water, etc. Servants are no longer of necessity tied to the house; they come here, as they would to a factory, and do their eight hours; in this way an active staff is available day and night. The provision of food, whether cooked or not, is arranged by a special purchasing service, which makes for quality and economy. From a vast kitchen the food



"FREEHOLD MAISONNETTES"

View of a dining-room (the hanging garden is seen through the window on the right).



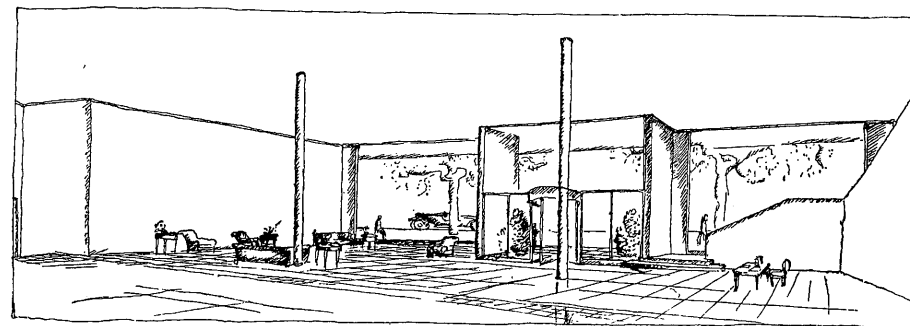
"FREEHOLD MAISONNETTES"

General view of one block

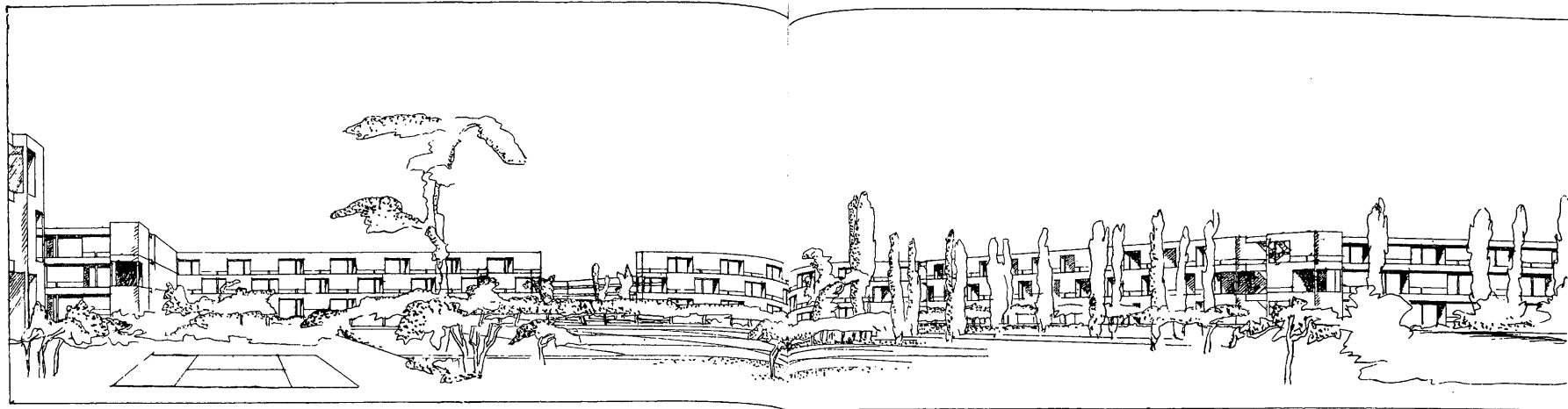
is supplied as required to be eaten, either privately or in the communal restaurant. Each maisonette has its own gymnasium and sports room, but on the roof there is a communal hall for sports and a 300 yards track. On the roof too is an entertainment hall for the use of the inhabitants. The ordinary narrow entrance lobby of the house is replaced by a vast hall, and a porter is on duty day and night to receive visitors and show them to the lifts. There is the great covered court, on the roof of the underground garages, for tennis. Trees and flowers all around this court, and all along the street in the gardens; in each hanging garden flowers and creepers. "Standardization" here comes into its own. The maisonettes represent a type of house-arrangement which is rational and sensible, without emphasis in any particular direction, but sufficient and practical. By the system of rent purchase the bad old property systems no longer exist.

No actual rent is paid; the tenants take shares in the enterprise; these are payable over a period of twenty years, and the interest represents a very low rent.

Mass-production is even more essential than anywhere else in great enterprises of this kind: low cost. And the mass-production spirit brings with it many unhopd-for benefits at a difficult time: domestic economy.

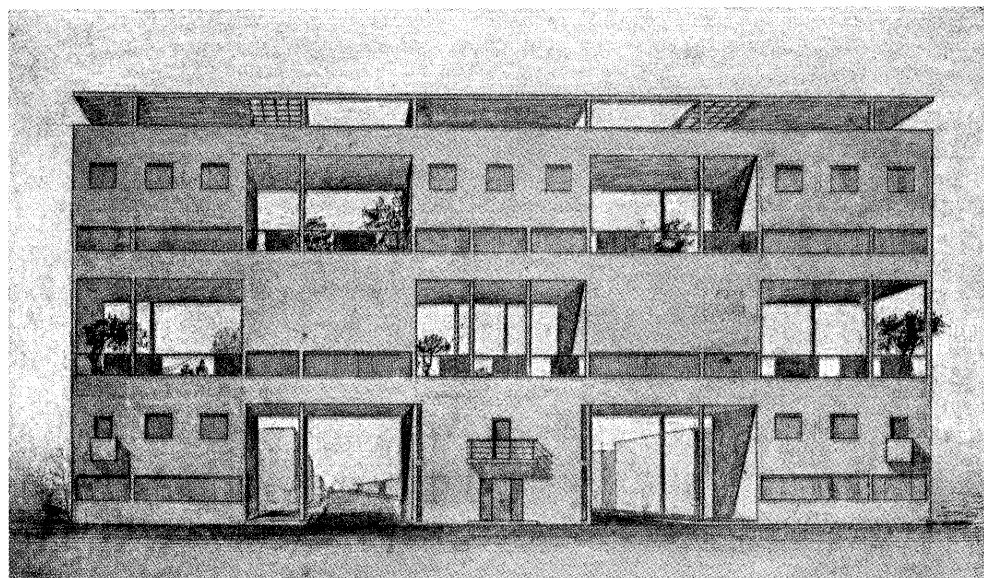


"FREEHOLD MAISONNETTES": ENTRANCE HALL



LE CORBUSIER AND

If we analyse the 400 square yards allotted to each inhabitant of a garden city, 300 square yards are given up to lawns, fruit and vegetable gardens, flower-result is often a few bunches of carrots and a basket of pears. There is no and sports generally at any time on any day right at one's door, not in "sports Let us put the problem more logically: house 50 square yards with small pleasure or at the sixth storey arranged in "honeycomb" fashion). Around the blocks of 150 square yards per house. In front of the houses a similar area of ground yield (irrigation, farmed-out labour, small trucks for moving manure, soil, The agricultural labourer is deserting the country-side; with three shifts of eight hours each in operation, the artisan here becomes his own agricultural labourer and produces an important part of the food he consumes. Architecture? Town planning? The logical study of the cell and its functions in relation to the mass may furnish a solution rich in results.

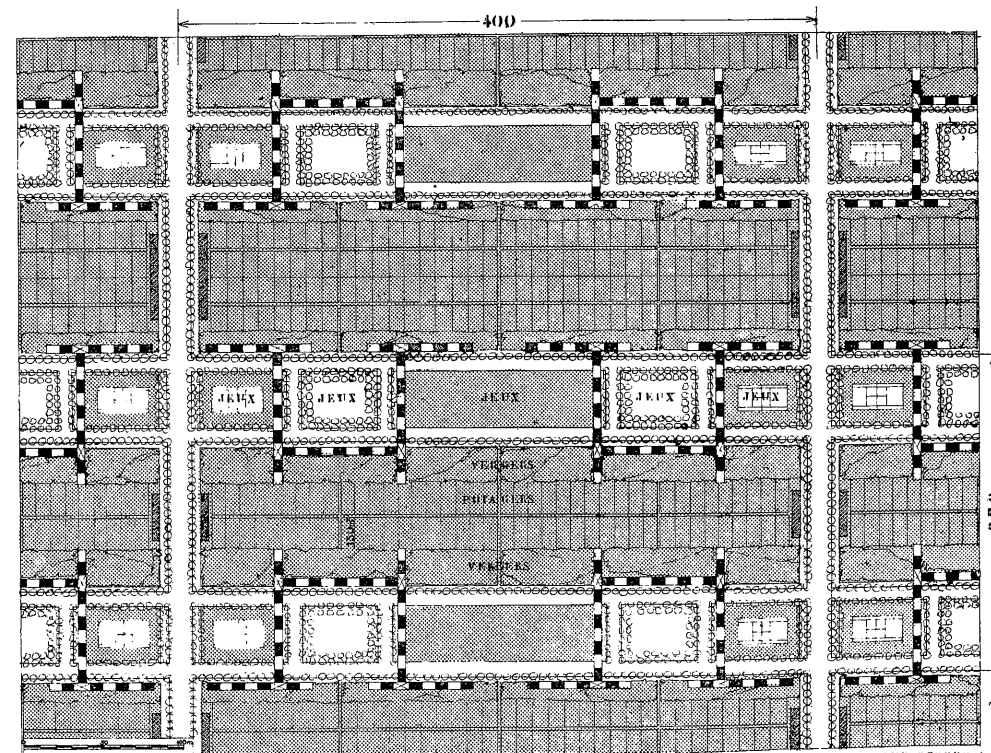


NEW DWELLINGS AT BORDEAUX

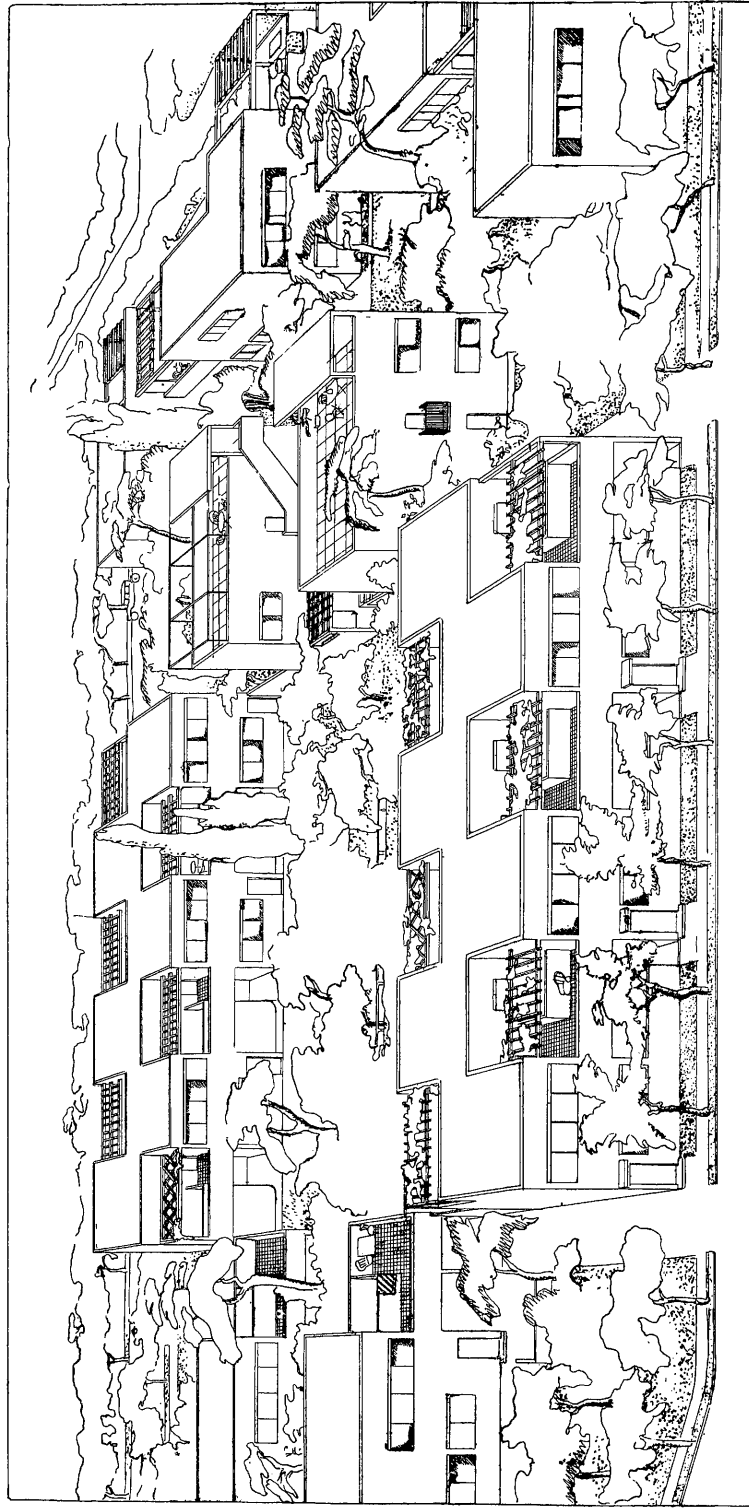
A first group in course of construction

PIERRE JEANNERET, 1925

we find that the house and its outbuildings take up 50 to 100 square yards; and beds, etc. All this involves an absorbing, costly and laborious upkeep. The space left for games or sports. Now it ought to be possible to indulge in games grounds," which are really only suitable for professionals or people of leisure. garden 50 square yards (both garden and house may be on the ground-floor level of flats or maisonnettes large playgrounds for football, tennis, etc., to the tune devoted to agriculture of an industrialized and intensive kind, giving a large produce, etc.). A farmer acts as superintendent and manager of a grouping.

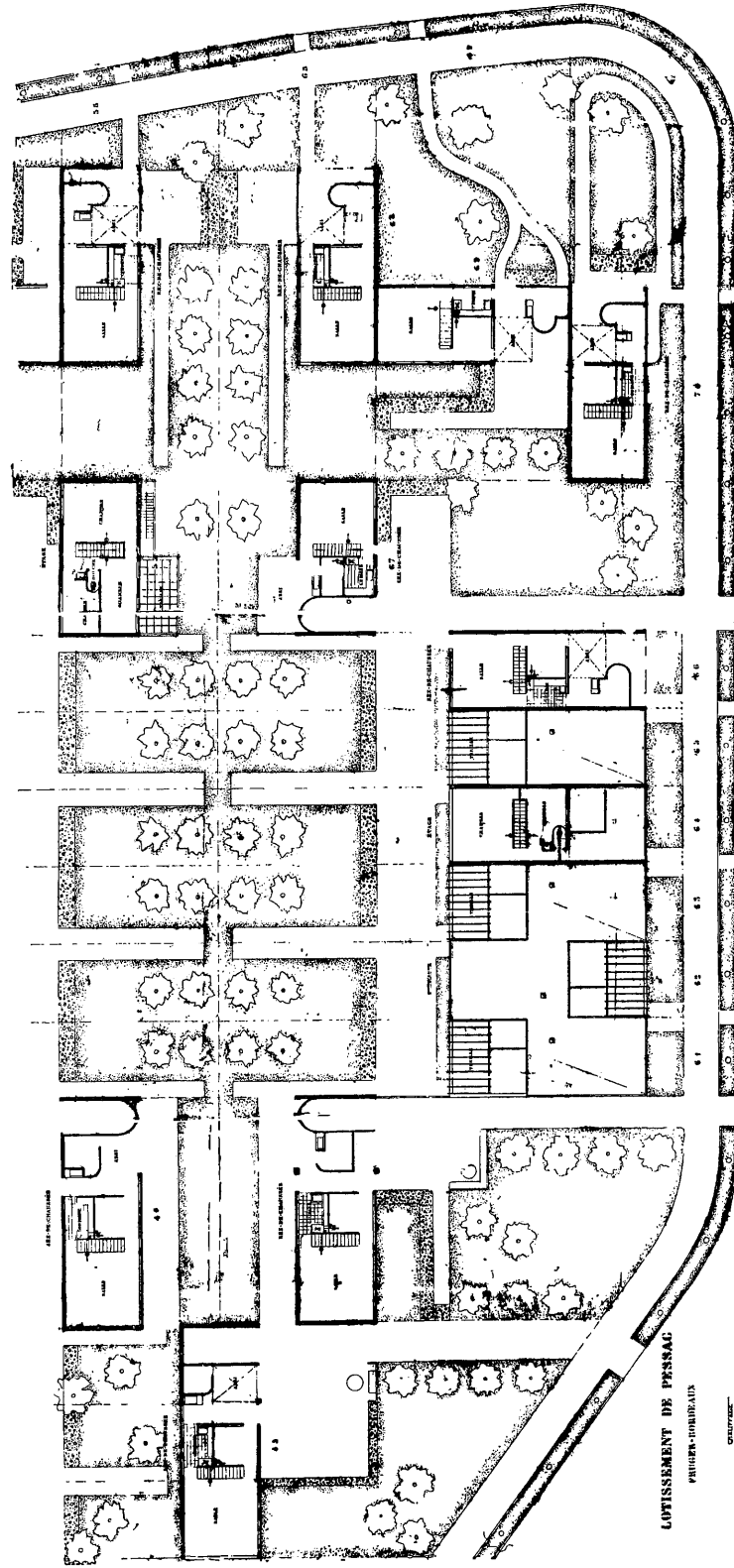


HOUSING SCHEME FOR GARDEN CITIES ON THE "HONEYCOMB" PRINCIPLE



BORDEAUX-PESSAC, 1924. MODERN DWELLINGS

Showing part of a large housing-scheme. The primary elements have been minutely fixed and are multiplied with endless variations. This is a genuine industrialization of the Builders' Yard.

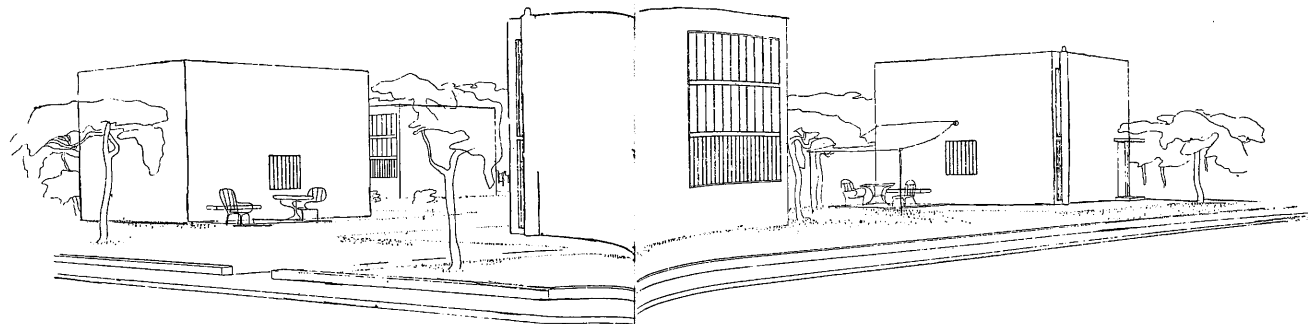


LOTISSEMENT DE PESSAC
PRINCE-IMPÉRIAL

LEGÈRE
PROFOND
HAUTEUR

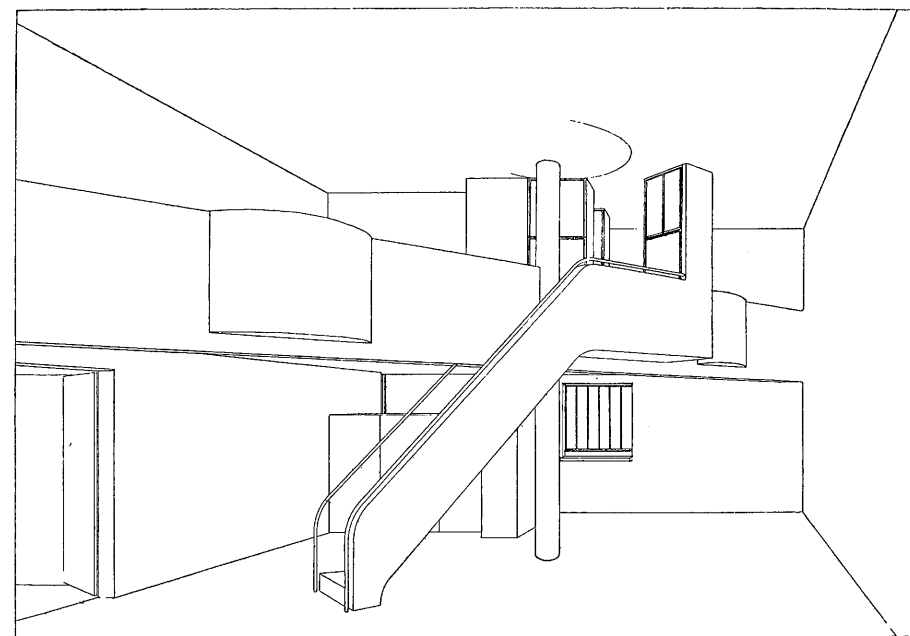
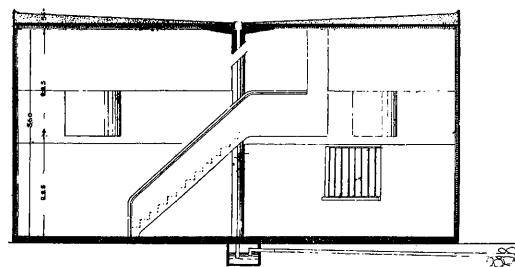
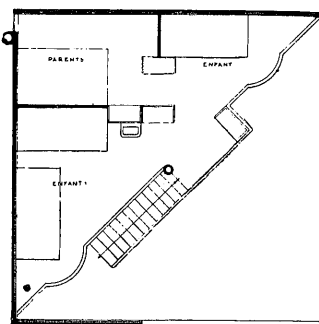
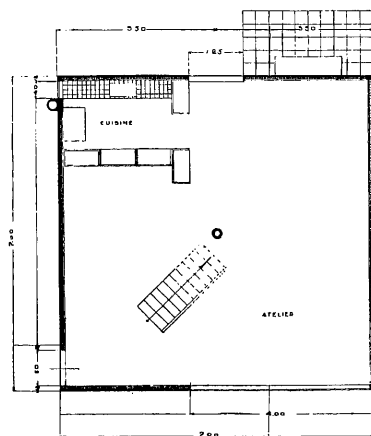
BORDEAUX-PESSAC

The first edition of this book had a profound effect on a large manufacturer of Bordeaux. It was decided to make a clean start. A noble conception of the aims of Industry, and those of Architecture, led this manufacturer to take a daring step. For the first time perhaps (as far as France is concerned), the pressing problems of Architecture, thanks to him, were solved in a modern spirit. Economy, sociology, aesthetics: a new solution, using new methods.

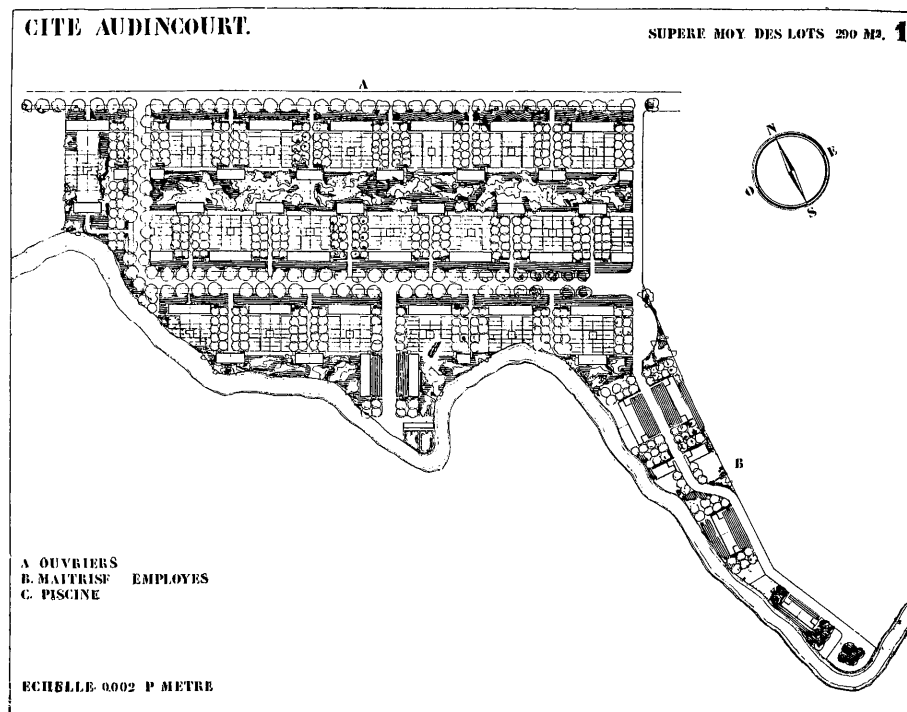


LE CORBUSIER AND PIERRE JEANNERET, 1924. MASS-PRODUCTION ARTISANS' DWELLINGS

The problem was that of housing artisans in a large and well-lit workshop; of lowering costs by the elimination as far as possible of partitions and doors, and by the reduction in the normal wall surfaces and heights of rooms—this by a little architectural management. The houses are built round a single hollow column of reinforced concrete. The walls are of compressed straw sheets (which have good insulating properties) rendered on the outside by 1½" cement rendering thrown on under pressure by a "cement-gun," and plastered inside. There are only two doors to a house. The loft or upper floor, on the diagonal, allows the ceiling to be developed to its full extent (21 feet × 21 feet); the walls also are displayed to their full dimensions, and, moreover, the use of the diagonal creates an unexpected dimension: this little house, 21 feet square, gives along the diagonal the effect of a dimension of 30 feet in length.

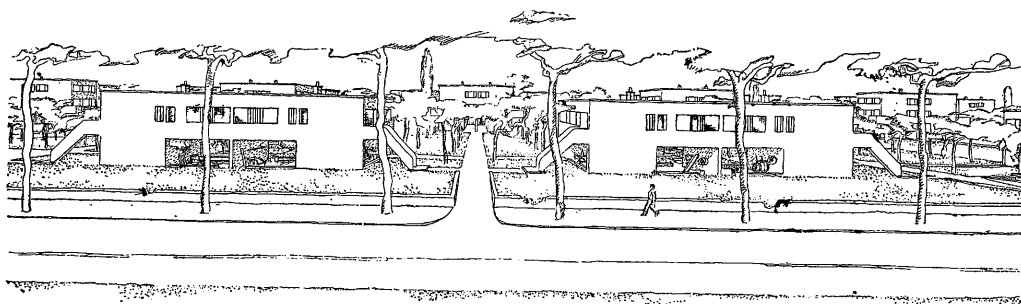


INTERIOR



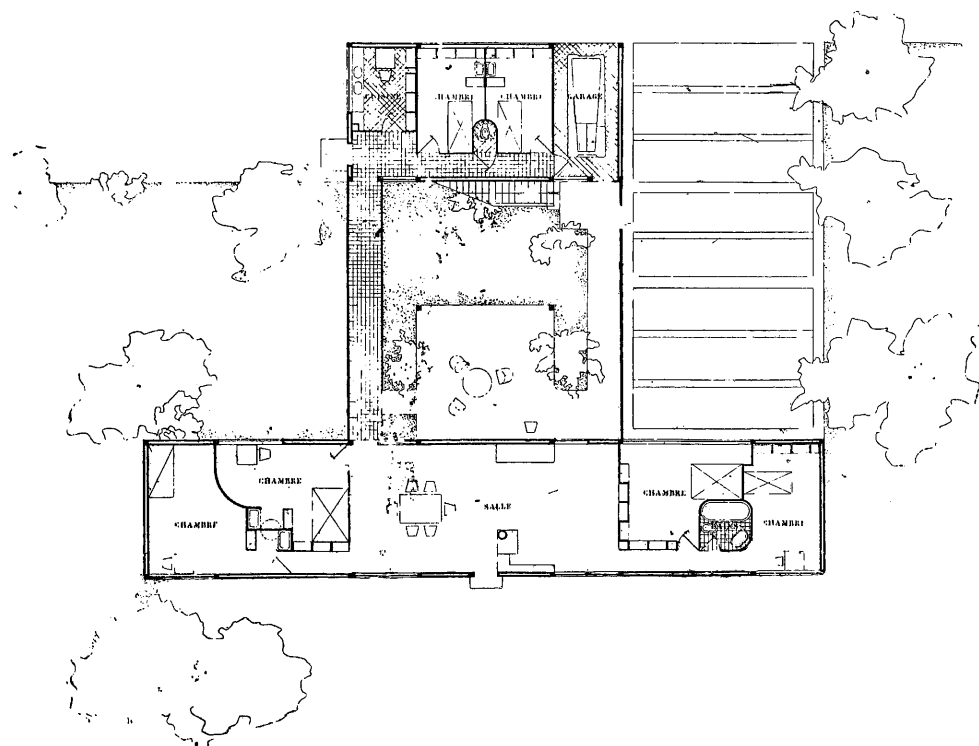
LE CORBUSIER AND PIERRE JEANNERET, 1924. HOUSING SCHEME

All the houses are constructed of standardized elements, forming a "cell" type. The plots are all equal, the arrangement regular. Architecture is very well able to express itself in a precise fashion.



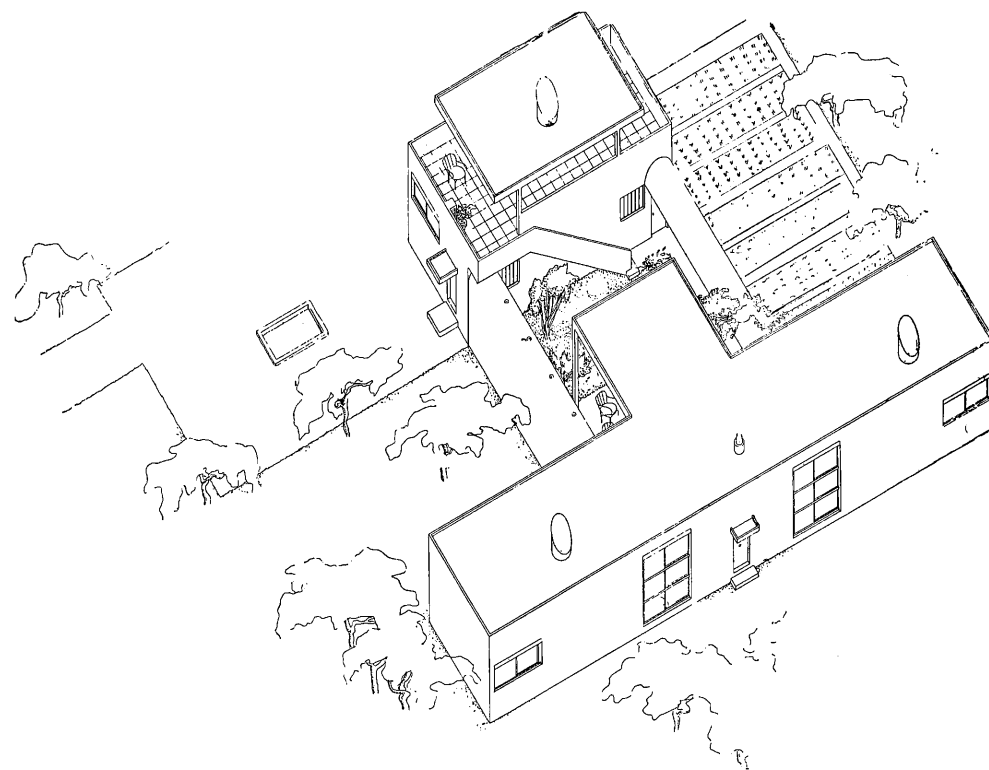
LE CORBUSIER AND PIERRE JEANNERET, 1924. ONE OF THE CELLS OF A "FREEHOLD MAISONNETTE" BLOCK (SEE EARLIER ILLUSTRATIONS).

A mass-production scheme, for the man of to-day: the elements are architectural, the construction is entirely industrialized.

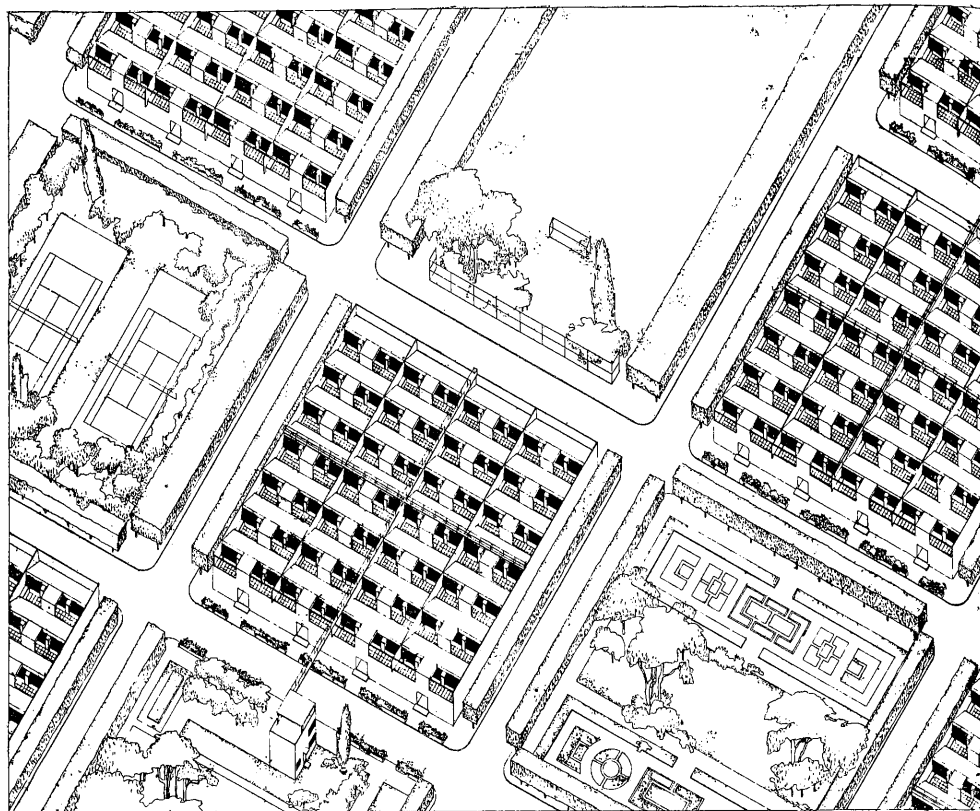


LE CORBUSIER AND PIERRE JEANNERET, 1925. A VILLA AT BORDEAUX.

Constructed of mass-production elements with the same machinery as was used for the garden-city houses at Pessac. Mass-production is not an obstacle to Architecture. On the contrary, it brings unity and perfection in detail and offers variety in the mass.



A VILLA AT BORDEAUX



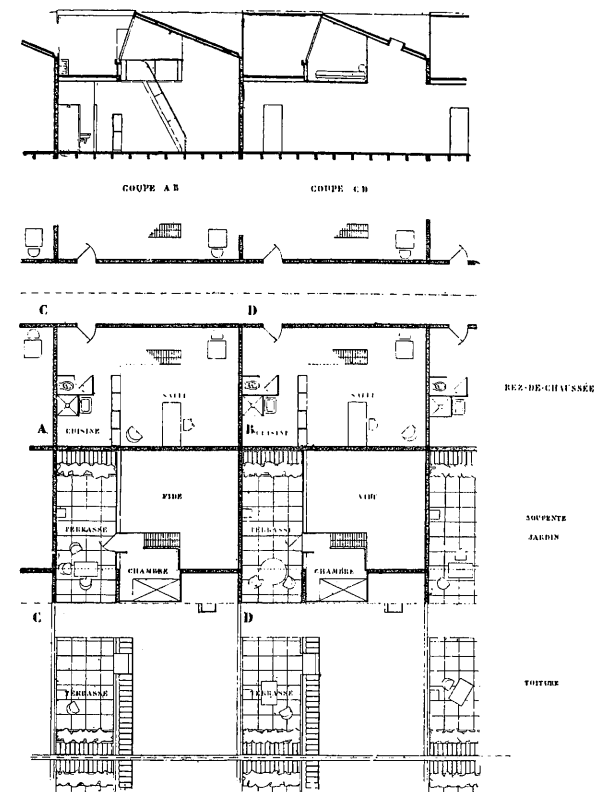
UNIVERSITY QUARTER

Attempts are made at enormous cost to build quarters for university students which may reproduce the poetry of the old buildings at Oxford. A costly poetry, disastrously so! The modern student is in any case inclined to protest against an old-world Oxford: an old-world Oxford is the dream of the modern Mæcenas, the donor of such a university quarter. What the student wants is a monk's cell, well lit and heated, with a corner from which he can look at the stars. He wants to find opportunity for games with his fellow-students at a stone's throw. His cell should be self-contained, as far as possible.

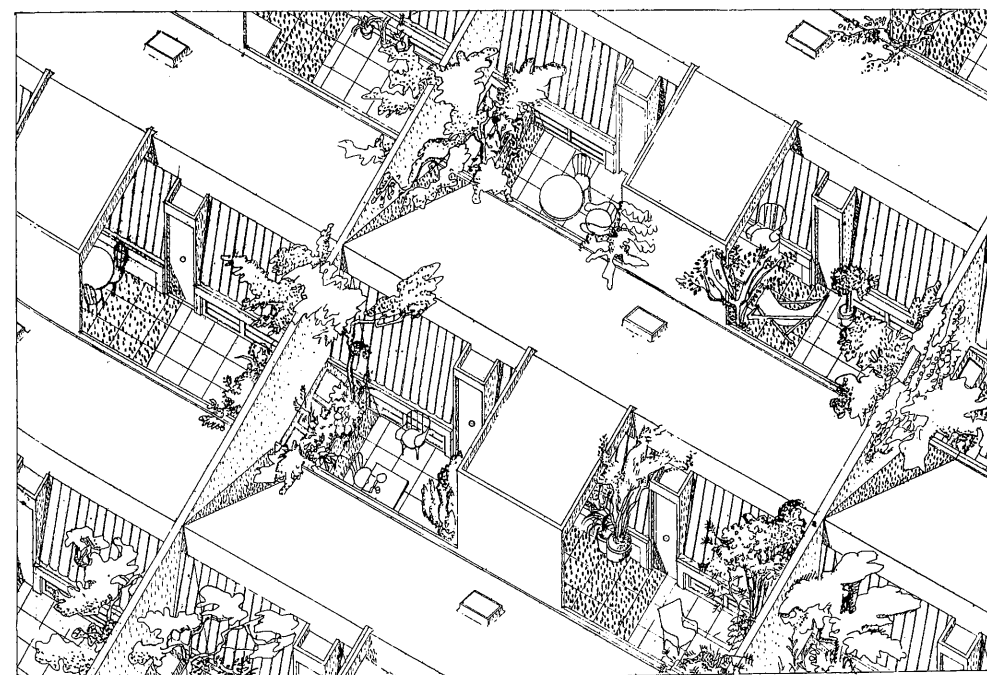
PLAN AND SECTIONS

Every student has a right to exactly the same type of cell: it would be invidious that the poor student should occupy a cell different from that of the rich student. There is the problem to be solved: the university-quarter-caravansary: each "cell" has its antechamber, its kitchen, its W.C., its living-room, its sleeping-loft, its roof-garden. Each student is cut off by walls from his neighbours. All the students can forgather on their sports-grounds or in the communal halls in the large buildings destined for communal services. We have to classify, form a type and settle the form of the cell and its elements. Economy. Efficiency. And Architecture? We can always achieve this when the problem is clear.

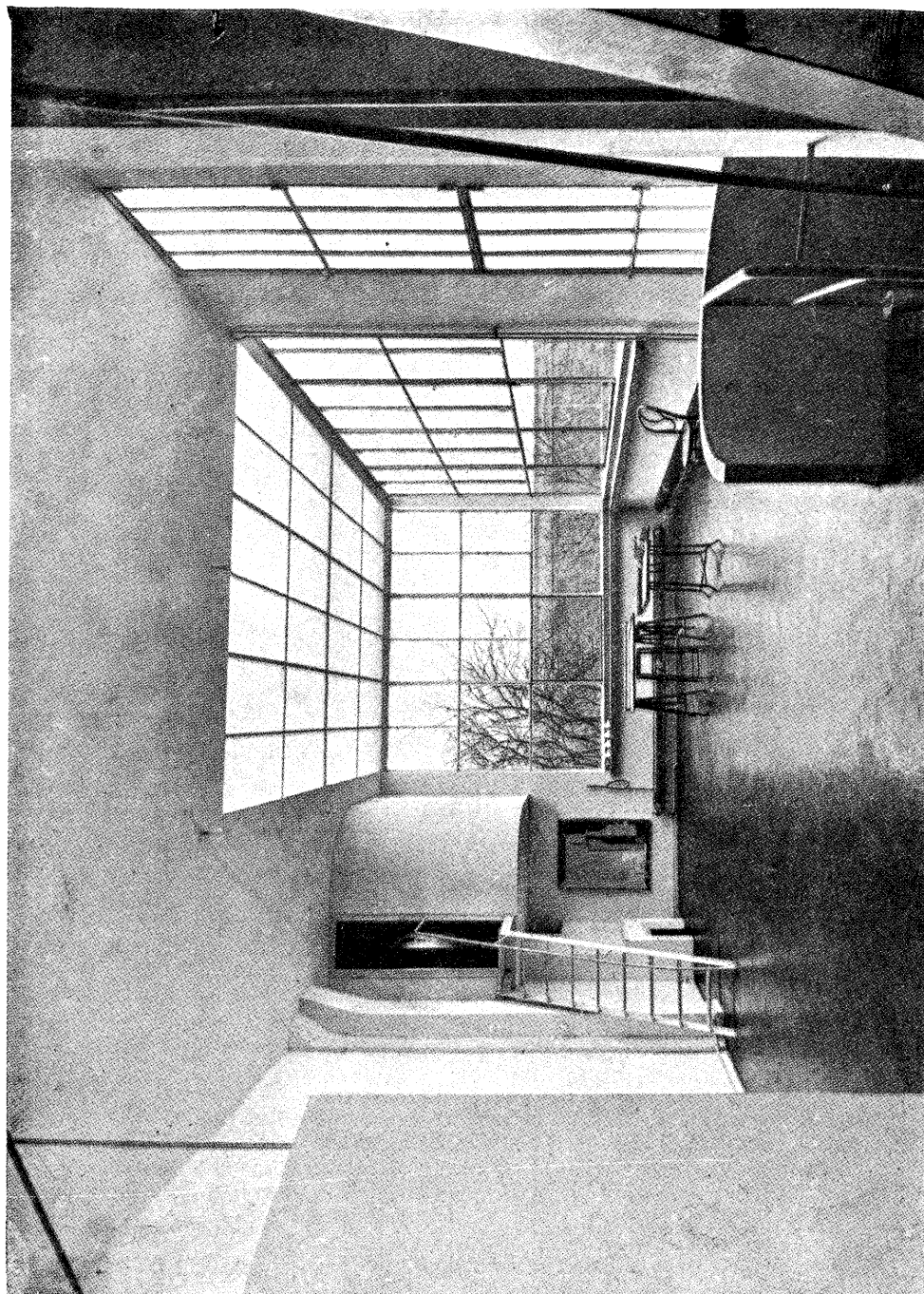
The university quarter is here conceived in a "shed" form; a mode of construction which allows of indefinite expansion, with ideal lighting and an absence of constructional (and so costly) masses. The walls are mere fillings in light insulating materials.



PLAN AND SECTION



DETAIL OF THE TERRACE-GARDEN



longer be an archaic entity, heavily rooted in the soil by deep foundations, built "firm and strong," the object of the devotion on which the cult of the family and the race has so long been concentrated.

Eradicate from your mind any hard and fast conceptions in regard to the dwelling-house and look at the question from an objective and critical angle, and you will inevitably arrive at the "House-Tool," the mass-production house, available for everyone, incomparably healthier than the old kind (and morally so too) and beautiful in the same sense that the working tools, familiar to us in our present existence, are beautiful.

It will be beautiful, too, with the vitality that the artist's sensibility can give to its strict and pure organism.

But it is essential to create the right state of mind for living in mass-production houses.

Everybody, quite rightly, dreams of sheltering himself in a sure and permanent home of his own. This dream, because it is impossible in the existing state of things, is deemed incapable of realization and so provokes an actual state of sentimental hysteria; to build one's own house is very much like making one's will. . . . When the time does arrive for building this house, it is not the mason's nor the craftsman's moment, but that moment in which every man makes *one* poem, at any rate, in his life. And so, in our towns and their outskirts, we have had during the last forty years not so much houses as *poems*, poems of an Indian summer, for a house is the crowning of a career . . . at that very moment when a man is sufficiently old

and worn by life to be the prey of rheumatism and of death . . . and of crazy ideas.

A question of a new spirit :

I am 40 years old, why should I not buy a house for myself ? for I need this instrument ; a house built on the same principles as the Ford car I bought (or my Citroen, if I am particular).

Collaborators already consecrated to the task : big industry, the specialized factories.

Collaborators who must be brought in : the suburban railway lines, financial organizations, transformed Architectural Schools.

The aim : mass-production houses.

The coalition : one between architects and men of taste, and the universal love of the home.

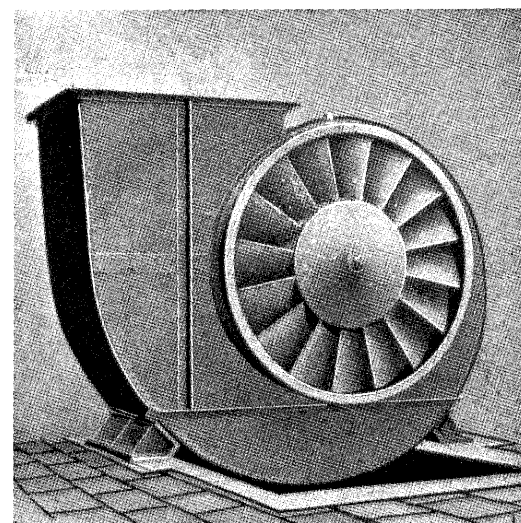
The executive : business concerns and true architects.

Irrefutable proof :

1. The *Salon de l'aviation* ;
2. Towns celebrated for beauty (the Venetian Procuracies, the rue de Rivoli, the place des Vosges, la Carrière, Versailles, etc. : all *mass-production*). For the mass-production house implies general lines of a generous and ample sort. It necessitates a minute study of every detail connected with the house, and a close search for a standard, that is for a type. When this type has been created, we are already at the gates of beauty (*cf.* the motor-car, the liner, the lorry, the airplane). For the mass-

production house will impose unity in the various elements, windows, doors, methods of construction, materials. *Unity in detail and large general lines*—this was the demand, in Louis XIV's reign, in the muddled, congested, inextricable and uninhabitable Paris of that time, of a very intelligent *abbé*, Laugier, who busied himself with town-planning : *Uniformity in detail and variety in the general effect* (the exact opposite of what we do to-day : a mad variety in details, and a deadly uniformity in the setting out of our streets and towns).

Conclusion : We are dealing with an urgent problem of our epoch, nay more, with *the* problem of our epoch. The balance of society comes down to a question of building. We conclude with these justifiable alternatives : *Architecture or Revolution.*



A LOW-PRESSURE VENTILATING FAN