

Buildings in Melbourne

From Gustav Lilienthal

With six illustrations

Part 1

The first impression, which the Australian seaports, on the newcomers makes after a month's of crossing, should not judge, when one wants to have an image of a metropolis. After the long monotonous, is one so unassuming in his requirement, so that the harbour suburb of Adelaide looks like a lovely whereabouts. Enter the ship later in Port Philip, round his wide semicircle Melbourne with his suburbs spread, then is all charmed. Never I would forget the pleasure, which I feel, when I, with armed a good binoculars, examine the lines of hills with buildings which looked like villas, the, like by the suburb St. Kilda, reach up to the beach. But depict the Impression of Sydney, I hold me not for adequate. At one of the most beautiful Harbours of the world situated, with wooded waterside and many little bays could Sydney only compare with Rio de Janeiro and Constantinople.

After a longer stay in the colonies I have found out, that from the three named capitals the youngest, Melbourne, the character of the new time mostly distinct. The subsequent description would suit in detail for other Australian places, but as a general view of newest culture Melbourne takes after my experience the first place.

The city complex, plainly named Melbourne, extends over an area of more than 130 square kilometres, although the settling 1835 count only 14 European. The percentage blowup stands only there, but the absolute blowup stands wide after the blowup of Berlin in the same time. In both cities have the development constructed extremely different. While in Berlin the town house with five floors moved out of the municipal area border and big part of the population lives this day in the inner city, spread Melbourne with his only 400.000 inhabitants over an area, in which here one and a half million people live. One suburb line up to the next, composed of graceful small houses surrounded by gardens. Nine trams, which now increased about further four lines, allow, like our horse trams; have there single lines over 80 trains daily drive to and from. Horse trams is missing here, instead whose cross numerous cable cars with underground Cable cars the streets of the proper city to the inner suburb.

The biggest feature of Australian city and especially Melbourne is the proportionally great expansion irrespectively of fairly expensive prices for ground. There are schedule of prices from land agents of Melbourne, can be seen from, that the prices with the prices of the suburbs of Berlin fairly the same. In the fifties one could buy a city construction site for only 20 Mark, but for construction think at that time nobody. The most purchaser going in the inland and many succumb exertions of the gold fields.

It's often has happened later and once in my time it has happened, that an old sailor found a yellowed parchment in his sea chest and in consequence of whose decision, to make for a port in Melbourne looking after his in the deed of ownership denoted Land, which him was given thirty years ago for the fun of his comrades on an auction. In the city doesn't find rightly, so he goes to the land registry office and expert there, that on his parcel is notice: Jumped by the Bank of New Zealand. This means, that a gorgeous bank, like the building in illustration 248, on his piece of ground was build and everything that wasn't nailed down his estate is. One advice him, to retain a lawyer, and him succeeds it, with the directors lead to a comparison, whereby our sailor the parchment piece leave to the bank for the little thing of 10.000 pound sterling. Such abandoned and at a venture take possession of land is not rare, how I often noticed by the perusal of the development plans. The Reason of the from our ratio, so differ development of the Australian cities lays in my opinion in the different determinations for the

settlement, the building edicts and the requirements for apartments of the inhabitants and transportation.

The determinations over the distribution of the community charges and the settlement, so interesting that a considered by itself, must be the purpose of the letter necessarily unnamed, against it offer technical details, which through smart searching of all technical easement for the „little building“ have evolved the one family house, much interesting.

For the technical traveler provides Melbourne a rich harvest, and I believe the pictures prove, that the sense of beauty not go empty at all.

Like London, so live in the inner City, the actually Melbourne, only who absolute wants to live there, like medical doctors and such businessmen, their shops are open from morning to night. The most buildings are department stores from the top to bottom, hotels, banks, clubs and government buildings. Round this city around, separate through the nice gardens of Carlton with the exhibition palace, the Fitzroy, Flagstaff and botanical gardens lag die inner suburbs East and North Melbourne, Hotham, Carlton, Fitzroy, Collingwood, Richmond, South Yarra, Emerald Hill and Sandright, the actually harbour of Melbourne at the Hobson's Bay. The most distinguished of this suburb ist East Melbourne. That in the illustration 249 pictured apartment house is one characteristic type of the buildings there. The high price of building sites allowed not patches of garden, but for the demands of the inhabitants that are not tenement block in our mind. Every tenant have quasi a house for himself with a special entrance and special stairs. This buildings, in them I been known accidently, contain eight rooms and accessory.

In this districts runs parallel to the main streets one small side road with a width from 3 to 5 metre , from which the backyards are accessible, were use to bring coal and take waste products away.

In the few less expensive districts is the entrance to the backyard through a passage form the side between the buildings, the, how at our illustration 250 obvious, often only 1 metre width, to suffice this purpose.. Our building regulations allowed neither the installation of so small streets nor so little spaces.

In the working-class suburbs Sandright and Collingwood reach the houses their minimal dowment. The houses to be composed of a room and a kitchen is there not rare. For 200 Mark after our money can one rent there such a house with a little garden, a backyard and a little shelter, it's contain a bathroom and a closet, plus a room for fuel.

For newly wed from the working class offer such buildings incomparable more convenience and comfortableness, as in our apartment houses in Berlin with their many dark stairs and dark backyard. A whole building companionship after the from John Bright founded princip of redemption of the money for building with weekly and monthly part payment make possible that people without money could buy a house and yard. The cash down payment amounts at the most companionship only 100 Mark. The rooms of the houses are small, 4 by 4 metre is the usual measure, but their offer enough space for the setting up of the furniture, because there only one window and a door in the house.

The other suburbs, Williamstown, Footscray, Heidelberg, Essendon, Brunswick, Northcote, Kew, Hawthorn, Praharn, Toorack, Caulfield, St. Kilda and Brighton, the, like the inner too, incidentally said form all independent communities, exist nearly of gardens, only in the few streets which lead to the train stations you can found such shops, that are in the suburb a requirement.

By the comfortable connections with the city is the live in the outer suburb very comfortable. Here can you rent a house with two rooms and comfortable accessory too. The municipal water pipeline provide all suburbs ample and cheap, so that a fountain is no important luxury. The water would be take out of the artificial reservoir at Yan-Yean, 19 english miles in the north-east of Melbourne, in which the Plenty River gush.

A Dam with a height of 10 metre close the river valley over a width of 1.000 metre. The so

formed lake has a scale of 9 english miles. The volume amounts 25 million qubic metre. The pipeline to the city is while the first seven miles a open aqueduct, but then serve a double pipeline for the continuation, which often led overground, on high pillars is far visible. Considering valves prevent, that the pessure of the water column could broaden on the deepest pipeline. Through this stop valves would be ever only the water of one part of a pipe plant downward, so that the pipe only the pessure of one water column of the decent need to resist of this part of the pipe. A number of stop valves prevent, that the lay of the pipeline the reservoir whole empty, then this could be percipitate a immense plight, because in whole Melbourne not one well existed. The water consumption capita on an average suppose of 150 litre per day. The requirement on the pipeline in summer would be through the much drinking tubs in the streets for the horses considerable enlarged. This tubs, which continual dined, located on nearly every street comer. The foresight of english coachman for their horses is certainly known but, in this case came me this only a little suspect, because were are the tubs, is only a pub, so that one not really know, who here is the moving thought.

Part 2

The installation of fourtains is nearly in all australian colonies linked with exceedingly problems and engulf often immense sums. Not alone lay the water very deep, it is often salty too and so unusable. Sooner the rainwater was collected in stonewalled cistern, which slopped vestige you can see often in suburbs of Melbourne. In the country would collect the rainwater now usually in iron receptacle with a volume of 1 qubic metre, that often half dozen fixed at eaves. A roof with 100 square metre gives by annual fall of rain from 30 centimetre 30 qubic metre water, which, filtrated, clear and delicious is. But stay the rain one time away so suffer whole districts under water short age. In such situations would be used on trains special water trains, to resucet he population before the die of thirst. The preservation of the cattle is in that way is impossilbe, what not was in time drive in other districts, decline wreched. In the last time was take the question of the water conservation in the colony victoria energetic in the hand, especially through the incitation of minister Deakin, who for this purpose a commission lead for the study of the american systems california and the mormon state. According to the reports, have the mormon created excellentd. I am confident, that one in Victoria, this truely question of live would be finally solve, when one endeavored for that reason with the same enthusiasm and skill.

Not so important is the question of the draining of Melbourne; but here are make some preparing steps. Ten years ago have be a competition advertise for bids for the acquirement of concepts, the implementation of the best plan was deferred because of the high cost.

In this moment would be the garbage through the garbage collection and the rainwater would be lead in the Yarra river. For the outer suburb grounds and for the great part of the inner suburbs suffice the consist system totally, because the gardens use all garbage as fertilizer. For the inner city would be a canalization certainly desirable

In the capital and other throught reservoirs supply cities in the inside is not disturbing notice of the enduring dought. There would be gardens water, and everybody the poorest too, can enjoy the benefits of a bath.

But the slightest bath is better than none, and just through the simpleness have make it so popular in such circles, where it here in the lower circles as great luxury must be fail.

The building of country roads is the general used as attachment of ways, with the exception of the streets of the inner city, which have wood pavement.

The stone would be hackle in spezial factories with machines out basalt., which outcrops at many places around Melbourne, . There the stones not very resistant, so is the consumption very high in a vast street system. For the construction of the sidewalk would used the hackle stones in so called tar pavement.

This tar pavement be qualified for parks and backyards (without vehicular traffic), train station halls, wine cellars, public lavatory, washhouses, bathhouses and that I know the excellence of construction activity, I want, to facilitate the application, inform the recipe, after this the same with the government building in Victoria came to execution.

The surface of the ground, which should be overlay with pavement, is previously square and ram. At first would be now a simple layers of our Chaussir stone instruct., which per cubic metre were mixed with 30 litre hot tar. On this would spread a 4 centi metre strong layers of little stone garbage, from this the slightest pieces through a 0,5 centi metre sifter. This material was previously mixed with 50 litre hot tar per cubic metre. Than came the third layer 2,5 centi metre strong and consist out the subtlest stone garbage with 120 litre hot tar mixed per cubic metre.

Every layer is rolled with a 15 metric hundredweight heavy barral and even there, where the barral suffice, stamp with a hand used ram. After all would be the pavement bestrew with sharp sand. The with the tar mixed stones must be dry and protect before rain, the same must laying some days before using, so that the excessiv tar can rundown. To many tar prevent fast coagulation.

Short after the completion is the pavement sill soft, so that every step were print. It is in the first weeks, when it, how in train station halls, immediately must be used, get thin bestrew with sand. After a month sounds the steps clear and the tar smell is gone. Now it can get free from sand. One found, that the first foot steps gone at all. Finally would the pavement smooth, like poured asphalt. The price is in Melbourne by a daily wages for a worker from 8 to 10 Mark für a eight-hour workday to 2,50 Mark per square metre. At us should be considerable cheaper, when it in suffice quantity to use.

Also in the gorgeous parks in und around Melbourne are made the main ways with tar pavement, while the byways only paint with hot tar and bestrew with brick powder, by what it is very good protect before the soften through rain. Also the many irrigation drain are mounted on the same way.

Through the long experience in the construct of little one family house have the practitioner envolved constructions, how they not will be used for our ideas ofr city apartment houses, but are suitable for rural vikllas like ours.

Many of the following Constructions are not only in the colonies usual, but also in England and France, and so suffice tried.

After the english system one lay the beams only 30 by 40 centi metre away from each other, by one correspondingly, named plank beams, used. Althought through the disjoining of the wood a few cuts of the saw get lost, but wins several not unimportant advantage. So can for example the floor be far weaker, because the same not even half so far lay free, how at us. Weaker wood is however in the rules also drier and let straight easier through nail. The warp of the whole wood beam, by what not rare eventuate a burst of the ceiling plaster, is also avoid, then the weak on end plank beam, at the floor get in their direction. The ceiling boarding can quite be dropped and also the pipe, used one instead of raw sliced strip of wood from 2 by 3 centi metre cross section, which, under the beam nailed, offer a better hold for the mortar and the pipe. How in the draft (illustration 260) easy obvious, can form behind the strip of wood a bulge, that the plaster can hold firm, like the through die pipe coming through mortar. So executed mortar is so durable, that the wooden structures, at those not like us the room between the shafts stonewalls, not only inside, but also often would plasten outside too. The hollow space allowed a excellent insulation against summer heat, special when throught the outer coat of oil paint the pores of the plasten are closed and the walls are inner wallpapers. From the insulated property of the papers make use of, to detain the heat of the roof away from the ceiling. One occupy for this pupose the ceiling from from top with spoilage. New should be perhaps, that frosty people in the winter with great success lay under the mattress.

The common facing of wood houses are the so called weather shelf, which with many ship load comes from Sweden and California. This weather shelf have a opposite profile (illustration 261). A other type of the paneling are like cuboid joined together and grooved shelves, which preferably brought in the trade from California. That in illustration 262 pictured house is so performed. The frame work of such houses exist out shaft from 5 by 9 centi metre profile, which in distance from 40 to 50 centi metre down of a step from 9 by 9 centi metre and up in a plate of the same strong mortise. Crossbeams would only for the attachment of the doors and windows put on, and for the diagonal connection steel strip, which inner over all shafts from the step to the plate oblique would nail. Every wall became so a cross. The Room under the roof would hardly ever used. At so less depth of the roof is also the high to less, that it not remunerated, produce special floor. The stairs dropped thereby. A entrance porthole is enough for repairs.

The roof wreath exist likewise out narrow put weak woods, their strain is outmost comfortable. From a previously setting is no speec. All would on the spot out one and two inch shelves and planks tailored and nailed. Mortise joint, combination and overlap are a overcome point of view.

Also at the construction of the walls of bricks is one endeavo, the warmth through diposition of a insulated air layer detain. On lead to this purpose two absolute separated walls with 6 centi metre space, the one also in every fourth layer in a distance of 60 centi metre throught laid in, on the ends coarse cut off steel strips of 3 by 26 millimetre profile bring in context. One reach thereby a firm connection, like throught the at us normal polish bond, by th in intervals bandage brick were lay over the space, especially by weak walls, by them a tiny pieces of bricks must fill the arise space. As well transmit the great stone profil more warmth, as the little iron profile. I have the connection with steel strips repeated in inclosure wall mit great success, take out for the protect against the winter cold, but it is necessary, that also the corners in the same way are insulated., then this would else more cold, as die wall surface, so that the air humidity of the room in the same way pitate as at the windowpane and made the wallpapers stain.

A anchoring with the brickwork is not usual, but one search a construction body of the bows through insert of steel strips in the direction of length to increase the wall.

For the roofing would at most, where no slate were used, would used galvanic corrugated iron. The metal sheet , after the Birmingham metal sheet scale with number 24 or 26 named, came length of 4 ½ to 10 english feet by a width of 2 ¼ english feet in the trade. The wave are 3 english inch width by 1 english inch depth. The metal sheet has also a profil, like our sheet zine, for that it has the preverence of the cheapness with bigger strength. It is enough to have a support in the sistance of 1,25. the verandas, without in Melbourne were rarely houses are, are a nearly bar none with corrugated iron.

For possible exhibitor later australian exhibitions I want notice, that in the colonies like in England only sliding window, the hang on cord with weigth, are usual. The doors have no composition tape, but would put up with each three chest hinge tapes. The locks are in usual citizen houses donned, because the doors are not strong enough, to be let in in the same frame. Always have the same doorknob, by them are shining metal parts less popular, as matte bronze ports. The later valid also for lamps and oven units etc., in aviodance of cumbrous Cleaning.

The using of the english door tape can I advise, yet such taps because of the greater numbers of friction surface never jar.

For the heating were use excessiv chimney after english type, because they were supply ready from England.

The for the chimney needed wall panelling would also produced out italian and belgian marble.

The gypsum piece would use inside, but never outside, against it are cementcasting ornaments

are very popular. At the in illustration 249 (on page 455) pictured apartment block exist all ornaments out cement casting. The areas are likewise plaster with cement mortar. All is without coating up to wood and iron pieces. The cement ornament, how also the broken through iron ganishment what would be multiplicat produced in Melbourne.

At the inner construction is mention, so that all outstanding corners would always edge in a wood strip. In beuter houses would lead the corners in such rooms, the, how vestibule etc., not wallpaped, but would painted, with a spezial hard getting Allaun-plaster, th so named Keens-cement, out.

Zinc sheet would never used for construction is mention, but always galvanized iron sheet, par example for bath tubs, downpipes. For the stocking up of chinmey and vally aganist it were used roll plummet, which is for this purpose unlikely durable, when it is more expensive too, than zinc. All were later paineted carpentry will be grounded supply at the construction set, round to ferfend a warp through the ruling humidity in the new building. The areas which coming in contact with the brickwork would must tar. This permitted, that one door- and window frame in a moment at the contration could fix in a wall. so could door and windows buy ready from store, during at us every build master state his special measure, but also this would not exact paused from the executing workers, so foster our carpenter firat the exact measure of the opening after completion wangle of the brickwork. At the smaller houses would mean this practice a greater delay in the completion.

The building autoriy there not prescribe for bids a time limit for the comletion of the plaster and for the move in such thin-walled houses, by them the outer exterior wall out two through is dissociate a place of centi metre, only exist of a half of a brick strong walls.

The inner configuration, like it here for bourgeois circum are usual, is hardly known there in the houses of the rich. All over dominates here the sense for the practise, was, like out this treatise would be apparent, show the national character of this young country.