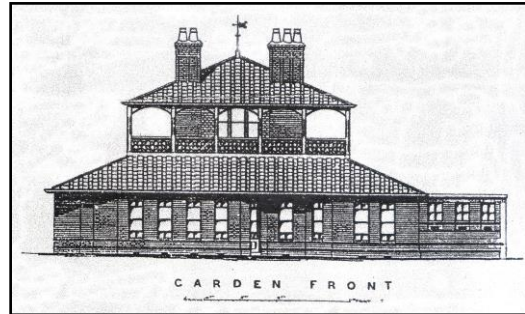


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**ON BUNGALOWS – XVI.**

It may be safely asserted of the bungalow illustrated in this article that there was not another like it in the United Kingdom when it was built, though it has since been copied freely in Bungalow Land, and in other places. A reference to the plans will show how it differed from all other structures of this class; the first floor consisting of one room only, which stands over the



centre of the house, completely detached, and surrounded by a wide veranda, tile-paved. This room is necessarily square on plan, and it follows that the arrangement of the ground floor rooms and is, to an extent, determined by it; - hence the general line of this floor is also, roughly speaking, a square.

A house built on a plan approximating this regular geometrical figure has the advantage of inclosing more room-space for a certain length of walling than one built on the commoner plan of an oblong parallelogram: hence the present arrangement is an economical one, and the fact might be noted by designers of cheap cottages for London and other cities. In this bungalow 200ft. run walling encloses 2,500ft of floor space; whilst that illustrated in Article XIII., 244ft of walling encloses 2,880ft. of space; a simple rule- three sum will show that there is a comparative loss of about 14ft of walling in the oblong building. The first floor of this house, called the "sun-room" on plan, for the sun shines on it the whole time it is above the horizon, was used for rather a novel purpose by the first tenant.

The building stood on a cliff about 60ft above the sea, and in summer, canvas curtains were hung to the veranda posts, and mattresses laid on the veranda floor, enabling all the male members of the family to sleep "out" at night without leaving home! This all-round veranda possesses a great advantage, if it has no others. It is always possible to obtain a seat on it practically in the open air, and sheltered at the same time from wind and rain. If the north and east sides are too cold in spring, the south and west sides are protected, and if, on the other hand, the other aspects are found to be oppressively hot in summer, a cool retreat may be found on the opposite sides. In fact, an occupant of the veranda can choose his position to suit the prevailing wind himself.

Another peculiarity of the plan of this house is that, though the washing accommodation is simple, there are no belly sinks or earth-buckets in the house, and this would also remain true if the earth-closets were converted into water-closets. The connection of drains with a house is necessitated by the use of w.c.'s, scullery, and housemaids' sinks. Here there is a man's closet in an open yard, and there is no more important point to be considered arranging the offices of every country house than the provision of proper

closet accommodation for the male members of the family in some sheltered place outside the house. A servants' closet is built off a covered, but well-ventilated, yard, and there is another closet at the end of the main passage, which, though available for the house, is not in it, for the doors to the open and covered yards, if left open, completely cut off all drain smells from the house. It will be noticed, that the scullery and housemaids' sinks stand against outer walls between two yards, and that they are altogether outside the house. There is a simple pantry, larder, and stores accommodation, as well as extensive presses for storing linen in the centre, and consequently the driest part, of the ground floor. In a house of this kind the upper room practically determines the position of the fireplaces on the ground floor, for they must come up at the angles of that room, otherwise they would be an obstruction, and in this position they are constructionally valuable, affording, as they do, substantial buttresses against which to stay all the upper framework of the walls and roof. These chimneys should be built in cement from the veranda floor up to the pots. The ground floor rooms are partly roofed with ordinary roofing tiles, and with flooring tiles on concrete.

No difficulty occurs in making that part watertight, which is covered with roofing tiles, but where the veranda floor forms part of the covering, great care must be taken to exclude the rain, especially where the veranda posts enter the sill, for they are sure to shrink. The great difficulty will be to construct the veranda floor so that it may be permanently watertight. If it was carried on brick arches, there would not be much difficulty in doing this; but the shrinking and sagging of the wood supports necessarily employed here make a careful treatment of this part of the building a matter of the first importance. With a view to economy all the ground floor windows are made of the same width – viz., 2ft between the brick jambs, and of the same height – viz., 5ft. 6 inches in the main building. In the offices the width remains the same, but the height is necessarily reduced.

Angle fireplaces are mainly adopted, for they take up less room than those in the centre of the walls;. The flues are 11in square, with half-brick divisions. In the drawing room, dining room, and some of the bedrooms, turned and shaped brackets are fixed from the walls to the ceilings, to support the outer trimmer beams which carry the veranda floor joists. The site is shown in the drawings to be level and the foundations, which are 3ft under the ground line, have concrete footings 2ft wide for main outer walls, and 18in wide for inner walls. The concrete is made of shingle and sand from the beach six parts, sand to lime one part. In all cases where sea sand is used, this material is well washed to free it from saline matter. The main outer walls of the ground floor are 18in thick, with a hollow space, and the walls of offices 13in thick, with a similar space. In every case the outer walls are hollow, and like the inner walls they have an asphalt damp course 3in above the ground line. Inner partitions are brick-stud, with quartering built in to take match-boarding. Quartering is also built into the inner lining of the main outer walls.

All dwarf walls to carry floors are built completely detached from the main building, so that in the case the main walls and breasts, any sink or settle with roof and other weights, the floors will not be carried down with them. It is important that the ends of the joists are not pinned into the main walls. The walls between the chimneys on the top floor are wood-studded and tiled.

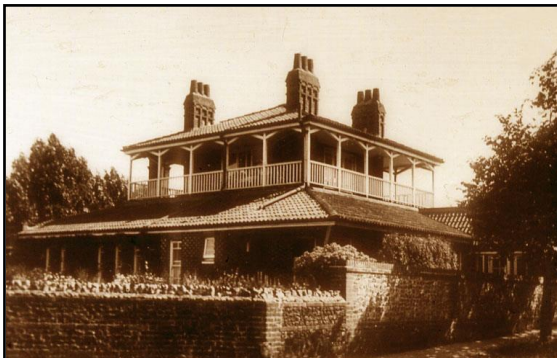
There is no plastering except in the offices, all the other walls and ceilings being match-boarded. The inner doors are 2ft. 8in by 6ft 8in with ventilating lights over to bedrooms only. The hall door is hung folding, the top panels being glazed. The window on the octagon in the dining room is made as a door, to give access to the garden. The office inner doors are 2ft 6in by 6ft 6in and the outer doors are framed, braced, and sheeted.

The passages in the house are laid with wood blocks, and encaustic tiles are used in the hearths and kitchen offices. The open and covered yards are paved with concrete slabs, and the fuel store has a monolithic concrete floor. The eaves project everywhere as shown, the rafters being cased with a fascia to carry the gutters, and soffit boards of match boarding. With a view to carry off smells from the kitchen range, a special ventilating flue 14in square is carried from the coving to the chimney pots, where it is furnished with a top like the smoke flues. The beams which cross the bedroom partitions, and rest on them to carry the veranda floor joists, are fitch beams built up with 9in. by 3in deals. Iron plates are shown between these fitches on the drawings, but there were none used in the actual work.

It is a matter of vital importance that they should be stiff and unyielding under the weight of the floor, which is unusually heavy. The joists here were filleted about 3in down to carry rough pugging boards, and the pugging consisted of fine concrete, which filled the spaces between the joists and covered them about 1in. deep on the top of the floor tiles, which were laid in the usual manner.

When a leak occurs in a roof over a boarded ceiling it is extremely difficult to locate it, for the water runs along the boarding and appears in the room below, several feet away from the faulty place. Trimming the joists round the flues where they rise through the upper floor should have careful attention, and if the house is meant for winter as well as summer use, a fireplace should be built in the "sun" room against one of the chimney breasts. On looking at the passages shown on the ground floor plan, it would appear as if some inconvenience must result from their being badly lighted, but, this is not so, for all the doors opening on the passages are seldom closed at the same time, and any one remaining partially open affords ample light. The glass fanlights over the doors help much to light the passage to the bedrooms in the daytime.

As the house was so near the sea, **no special bathroom was provided**, nor was any provision made for a boiler in the range, for gas was available on the



estate, and a geyser fixed in the scullery afforded an ample supply of hot water for all purposes. There would, of course, be no difficulty in fixing a high-pressure boiler in the range and a cylinder, with cold supply, close to the kitchen ceiling. This apparatus would send hot water to a bath fixed in any of the bedrooms, and also to the scullery and housemaids' sinks.