

of the system described below claims that this objection can be easily overcome.

This system, of which the wall construction only is described in this article, is for use in any class of building—whether it be a dwelling house, factory, warehouse or church, or only a shed or small motor garage. It gives facilities for making any of the parts of any size (in reason) in length or thickness of section, and for any degree of strength required. For the warehouse or any very large or very high building, the structural parts, such as piers, columns and beams may be built in situ. In such erections it is quite as valuable as for use in a shed or dwelling. The method is elastic, in that factory-made parts can be extended. It also permits of any kind of adornment, that is to say, it may be used in the fashioning of any design, though it were better, in such as applies to any special material, whether wood, brick, stone, etc., that designs should be made to suit the material. In this there is great scope for breadth of effect and originality. Exposed parts will be made in multi-colours, such as grey, terra cotta, black, blue, pink and yellow.

In cost—this is a very important item—the dwelling house will certainly not exceed the present cost of a good wooden building, and the concrete building will be lasting, and will not need repairs. Fire insurance will be reduced to a minimum, whilst in the congested areas of towns and cities there will be no risk of life from fire. As to the cost of buildings of the warehouse class, this will be less than brick, probably much less. In damp-proofness this method of building resembles that of wood construction, there being studs and plates, weatherboards and lining. The difference is that the parts are all concrete or reinforced concrete in place of wood. The following illustrates and describes the walls only. Reinforced concrete is referred to as "R.I.C."

Fig. 1. Section through a wall shows part of an R.I.C. stud, in which P (blocked in black) are horizontal pieces or purlins; X are concrete tiles or slabs or R.I.C. boards, on outside of wall, whilst Z are corresponding parts in concrete or R.I.C. There are several ways of putting purlins in or on and securing same as shown opposite A B and C. When style A is employed, the stud is shaped to fit the purlin—the latter is thus keyed in because its shape is the same as the stud and the purlin cannot move or fall out. In this style (A) the purlin is put in from a horizontal position. At B (a different style), is W, a wedge. This was designed to enable the purlin being placed on the studs by putting in the purlin "face on" (this operation being both easier to effect or more rapid than the style as at A); the purlin is placed in position on the studs, then the wedge W is pushed home, sliding same into position on top of the purlin; the void in stud is left for the wedge, giving ample room to enable the placing of the purlin. It is thought that this (B) is the method which will be generally adopted. C is in all respects similar to B with the exception that E being a corbel, is added. This corbel is for use in conjunction with methods A and B, and is used in order to provide a greater bearing for the purlin should a stud of very

thin face measurement be employed (say in studs of less than 2 inch face width, when the corbel may be of any required length). Generally B will be adopted. It will be seen that it is impossible for the purlins to become displaced. At X are shown concrete tiles or slabs or R.I.C. boards, which are the outer covering of the walls. These pieces are formed at the head with a projection on the inside shaped as shown in Fig. 7, and are "hung on" to the corresponding shaped part of the purlin, whilst near the bottom (to fit on top of under tile, etc.), is a part corresponding to the shape of the head of the lower course. This projection may be solid through the length of the tile, or R.I.C. board as the case may be, or may be made as lugs, if so desired. It will be seen that the outer covering cannot be displaced. The X pieces may be made as shown in figures 6 and 7—that is, canted outwards like weatherboards, or may be laid with flush surface as shown in figure 5, and may have different shapes or rebate. The X pieces are lapped, rebated and grooved on the vertical edges to render these joints also weatherproof. Tiles, slabs or R.I.C. boards are shown at Z, forming the inner lining. They will be made rough where it is intended to plaster on same, as in housework, office work and the like, and made with a good smooth surface for warehouse and factory walls, where it is not necessary to cover joints, but where still a good surface and appearance are desired. These Z pieces are hung on the purlin (like the X pieces) but the bottom edges are differently made to the X pieces, as weatherproofing is not needed. Still again it is clear that Z pieces cannot be dislodged. These Z pieces will be rebated at horizontal joints too, if so required.

To go into further detail—Fig. 2 represents a stud showing the different shapes at purlin rests—either A, B or C will be the shape, depending as to whether it is intended to place and hold the purlins as shown in Fig. 1, and either as at A, B or C. The sleeve is shown at S. Figs. 6 and 6a. This is intended for use in lengthening purlins between stud supports, the distance between the abutting points of the purlins within the sleeve being regulated as the extension of the length is required. It will be noted that the sleeve is a three-sided piece, and is left open on the outside to allow the tiles or R.I.C. boards to hang close to the purlin.

Fig. 4 is an elevation of the framing, looking at it from the outside, and shows at A, B, C in elevation, that corresponding to A, B, C, in section in Fig. 1, i.e., it shows styles without wedge pieces, with wedge pieces, and with wedge pieces and corbels. The foregoing finishes the description of walls entirely made of concrete or R.I.C.

The author of this method of construction (an architect of long standing) has had much experience in concrete building, and knows the difficulties attending transport in country districts. He is also aware of the peculiarities of the public mind born of the long use of building in wood, and believes there are many who would like a concrete outer covering with wood lining or plaster inside, in order to reduce insurance, do away with painting and repairs, etc. Hence he has devised his scheme to meet these re-