

ing, which will then be driven into the facing, and the aggregate of the latter forced outwards, so that not only will the two thicknesses be formed into one homogeneous body, but the aggregate which it is desired to expose will be found at or near the surface when the shuttering is removed.

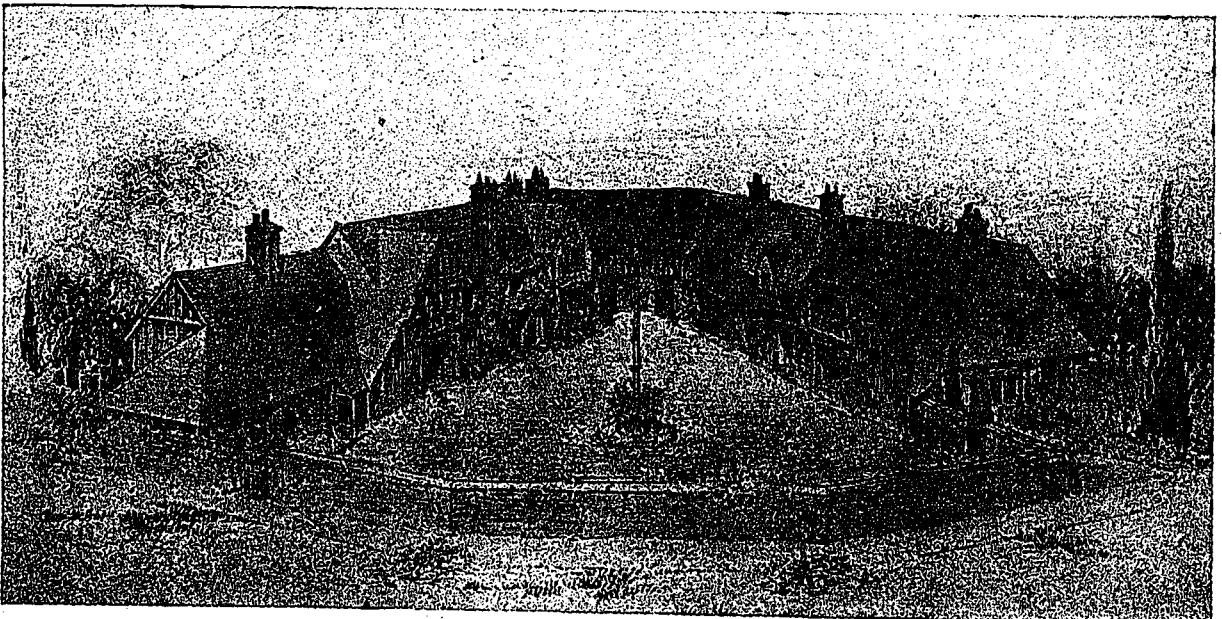
An alternative method of depositing the facing mixture in the required position, and one that is often employed, is by the use of iron sheeting, which is placed inside the wall-form, its distance from the outer shuttering being from one to two inches, according to the thickness decided upon for the facing. The form is thus divided longitudinally into two compartments, which are then filled with concrete, the outer space with the special mixture, and the inner with the ordinary material. The iron sheet is then gradually withdrawn, the backing meanwhile being tamped against the facing. To obviate the difficulty experienced in placing the material within so narrow a space as that containing the facing mixture, the iron sheet is not usually more than one foot high, and to keep it in position it must be clamped to the form, and handles may be riveted to it, in order to facilitate its withdrawal. After the shuttering has been removed the surface may be treated by scrubbing or bush-hammering as before.

By selecting suitable aggregates either for the whole body of the concrete, or for use as a facing, similar effects may be produced by the same methods on the surface of concrete blocks. The operations may be carried out either after the wall has been built, or by treating the blocks before they are used upon the work. The latter will be found to be the more convenient plan, since after the blocks are taken out of the mould they have to be stored for a considerable period before they can be used, and by that time have become thoroughly hard. By scrubbing them,

however, shortly after they are cast, and while the concrete is green, the work is rendered easier and much less time is occupied in the process.

The decoration of the interior may be carried out in various ways—indeed, there is no limit to the number and richness of the effects which may be produced. The walls, or portions of them, may be “brushed” or the surface may be left smooth and suitable points of accent selected for enrichment. Mosaic patterns worked out in colored marbles, burnt clays or other material may be laid in precast slabs and either incorporated into the wall by being laid next the form during concreting, or cemented into recesses left in the wall for the purpose. Such recesses are cast by fastening slabs of wood in the desired position on the inner face of the form before the concrete is filled in. Or again, patterns may be designed, and the particles forming them glued on to sheets of stout paper, which are attached to the form in the required position and the concrete filled in behind them.

Much more could be written on this fascinating subject, but enough has been said to show that by following up the line of thought here suggested, and by a combination and extension of the methods above described, the opportunities afforded for the exercise of the imagination and for the expression of artistic feeling, both with regard to design and surface treatment, are unlimited. Much of the work done in the early days was crude and lifeless; in their enthusiasm for concrete the strong, the durable, the hygienic, the workers of that time lost sight of the possibility of concrete the expressive, the satisfying, the beautiful. To-day, science and experience are demonstrating to us the value of concrete as a structural material; to-morrow the architect and the designer will reveal to us its inherent beauty and its varied charm.



AN ATTRACTIVE APARTMENT HOUSE FOR MILL OPERATIVES AT DANIELSON, CONN.