

CONCRETE

NEW METHOD IN BUILDING

A new type of building—of one-piece concrete slab walls—was erected recently by the Rebell Building Co. Ltd., of Perth, at Mt. Hawthorne, Western Australia.

Thirty-three wall, partition, and floor slabs, and 14 other concrete sections went into the construction of this residence, which was finished roughcast outside and had a tiled roof.

The slabs, measuring up to 15ft x 12ft 4in. and weighing up to 4½ tons, were made in stacks flat on the ground, and lifted in position by a crane.

The reinforcement in the shape of round steel bars was spaced at 12in centres, and the looped ends of the rods, exposed in gaps along the edges of the slabs, served for joining of the sections by means of curved bolts. On tightening the bolts, the joints were grouted up.

This type of construction calls for high quality both in material and workmanship, as the slabs otherwise would not stand the severe test of lifting from the flat to the upright, yet this very fact of assured quality makes a lighter construction permissible; 3in in thickness being ample for outside walls of cottages, and 2in for partitions.

The slab type of construction also allows the economical employment of

allows the economical employment of such features as pier foundations, flat roofs, dry and warm concrete floors, cindercrete partitions and lining to walls.

Naturally the slabs can be manufactured better and cheaper at a central yard than on a job, and the cartage to job in most cases would cost no more than the cartage of raw material and the shifting of plant.

Continuity and increased strength of reinforcement are assured in the joints and the tightening of the connecting bolts prevent any crack formation in the joints after grouting. The cold paraffin wax or bitumen processes are used for damp-proofing unprotected exterior walls.

A travelling crane also is required for cottage work, and by its means all the slabs could be erected within a few days.

Hundreds of thousands of slab buildings have been erected lately in Europe and America, and the type should also be well suited to Australian conditions.