

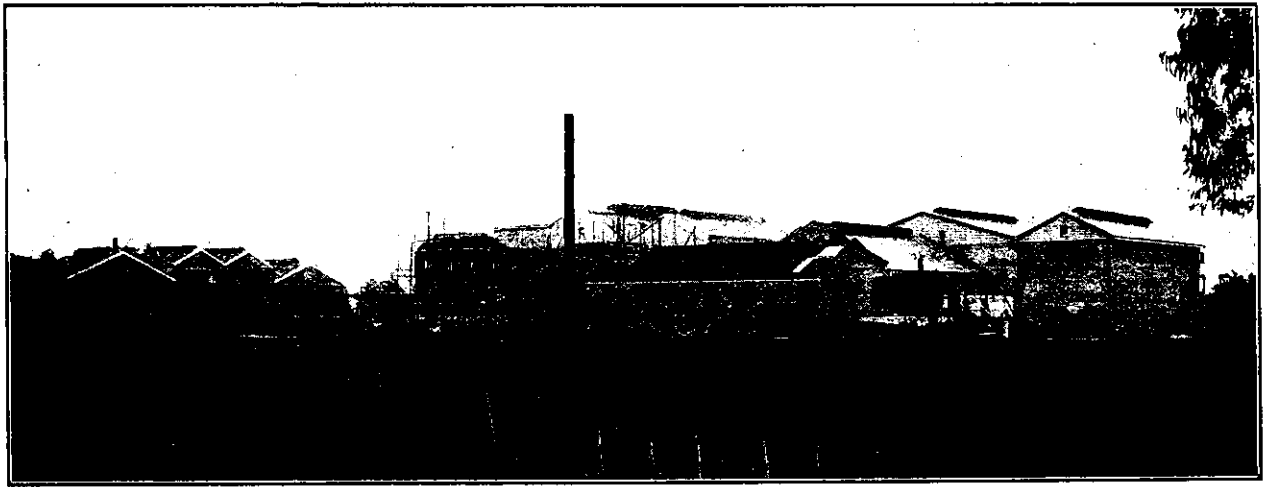
"If the practises illustrated above occurred only in isolated and infrequent instances they would have little bearing on the general quality and endurance of concretes. Unfortunately, however, they are all too prevalent; and although their impropriety is recognised when pointed out, they are yet of general daily occurrence and will continue so until more general understanding is had of their economic fallacy.

"When this understanding becomes general, such procedure in the manufacture and placing of concrete will be no more tolerated by owner, engineer, or contractor than would the distribution of fire-producing chemicals throughout the structure of an inflammable building. Under certain favourable conditions the two might prove equally potent for trouble and damage.

"The ultimate loss falls on the owner. Cement is a wonderful servant, standing much abuse. Trouble will probably be some time in coming, and

## The Speculative Builder

The problem of what to do with the incompetent speculative builder is of course no new one. Many a man has had bitter reason to regret the purchase of a house built by this method. It must be obvious to a thoughtful person, that when a man offers to build a house and 'save the architect's fees,' that he is going to suffer in some way, else the whole architectural profession is an unnecessary encumbrance. It is not altogether easy to convince the average person about to build that it is false economy to dispense with the architect's services, though one strong reason, that of repairs, ought to be sufficient to deter people from dispensing with adequate supervision. Unfortunately the purchaser sees only the surfaces, internal and external, of the house he buys, and he has to take on trust the builder's statement. What guarantee has the purchaser of the quality of



New Freezing Works for the Orua and West Coast Meat and Produce Co., situated at Aorangi near Feilding.  
L. A. James, Consulting Engineer, Wellington. (See "Building Notes" for details.)

by then the contractor will be paid and away. Nor has there been any normal obtuseness on the part of the latter. He has done his work probably as well as he knew how, in full accordance with average practise, and as carefully as his bid rate-per-yard has permitted with the making of a reasonable and fair profit.

"Obviously, the remedy lies first of all in better understanding of concretes, not on the part of those whose knowledge is beyond question, but on the part of the great army of every-day workers on whom dependence must so largely rest. If improved methods of mixing can be produced which will secure better results without increased cost, the problem is much simplified, but if this cannot be accomplished, there will have to be an economic readjustment all along the line, with the securing of better-quality concrete and a proportionate recompense to the owner in the quality and endurance of the structure he has purchased."

the woodwork and the plaster which are carefully hidden behind the bright paint and tasteful wall-papers? A person who buys a house built without proper supervision should allow 15% to 20% on to the cost to cover repairs which will surely be necessary before the house is very old.

A method is being tried in England to do away with the speculative builder house by calling for tenders for quantities of houses say up to 20 of one type. This can of course only be done under proper organisation, and is usually only practical in some of the Garden City or Housing schemes. Its advantage is that the speculative builder has no chance to compete against the big contractor in quantities such as these, and the client gets the benefit of a good article designed and supervised by an architect, and built by a builder of reputation, at a lower cost.

These schemes sound rather ambitious to us in New Zealand, but something should be done to protect the public. Now that we have Sir Rider Hag-