The Wanganui Club

The illustrations on page 18 are of the New Club house in course of erection for the Wanganui Club. The elevations are being carried out in pressed brick and cement facings. The roof is being covered with Marseilles tiles. It was at first intended that the Loggia and facings were to be carried out in granite, but owing to the cost of the stone it was cut out and cement substituted. The accommodation consisted of a Lounge, Billiard Room, with four tables, Sitting Rooms, Dining Room, Committee Rooms, Card Rooms, Stranger's and Secretary's Room. The Staff and Kitchen quarters are most complete in every detail.

The interior decoration, of which the view of the Lounge is a sample, is being carried out in plaster, relieved by timber. The building will be lit by electricity generated by a private plant.

It is expected that the building will be completed early in the New Year. The Contractors for the building are Messrs. Russell & Bignell of Wanganui, and the Architects, Messrs. Rush & James of Hastings. The total cost will be between £9,000 and £10,000.

Re-inforced Concrete Construction

We illustrate a novel piece of re-inforced concrete work carried out at St. Mary's College, Chesterfield, England, together with details showing reinforcing.

A typical floor construction in the former is illustrated in Fig. 1. The total span of the main beams in this section exceeds 40ft. The total depth is 27in., and the width 9in. The elevation of these beams is shown in Fig. 2, and the central section in Fig. 3. It will be seen that the maximum tension resistance comprises four stout rods, the upper pair of which provide the shear resistance, in conjunction with the stirrups. The hooked ends in the bearing-lintel are a feature of the design, the construction forming in reality a T end to the beam bearing on the piers, and providing a satisfactory solution of the difficulty which is sometimes found in obtaining an efficient template to distribute the load over an adequate area of brickwork. The floor is 5in. in thickness, designed on the continuous principle, with negative tension-rods across the top of the supporting beams. The grip of these rods is increased by hooking the ends, as shown in the section of floor (Fig. 4.)

Fig. 5 illustrates a plan of the roof main beams. The principle ribs are shown in elevation, Fig. 6. These beams, or ribs, are, as will be seen in Fig. 7 (section), reinforced in the raker with six stout rods, well bound together with links, and hooked and wired at the angles. The ribs are made homogeneous with the template and main beams of the floor below, and secured to the horizontal roof-beams by reinforced quadrant angle-brackets. These have a radius of 4ft. and are the same width (10 in.) as the raker and horizontal of rib. Fig. 8 illustrates a section of the horizontal portion of