St. John's Cathedral, Limerick.

I. THE FABRIC.

By A. D. DEVANE, B.ARCH., M.R.I.A.I.

The foundation stone of what is now St. John's Cathedral was laid by Bishop John Ryan on May 1st, 1856. A study of the plans and structure of the present Cathedral indicates, at least, that the design of the original building was altered and its dimensions enlarged, some time after construction had commenced. It is possible, therefore, that a parish church had been originally planned to supplant the old penal chapel which had been built a century before in the shadow of the city walls by St. John's Gate. We cannot, of course, measure the extent (if any) of this change of plan, but it is reasonable to believe the width of the side aisles was increased and the roofing over them altered. It is also possible that the height of nave and aisles was increased, although it seems that no substantial change of plan was made in the overall length and breadth of the Church, possibly because the foundation may have been laid or portion of the walls already built. This change of plan may account for several features in the design which have been observed in undertaking the present scheme of renovations on the Cathedral.

The attention of the traveller, approaching Limerick from the surrounding plain, is held by the graceful silhouette of a slender spire reminiscent of Salisbury, for St. John's is undoubtedly one of the most beautiful landmarks of its kind in Ireland. Seen from St. John's Square, the Cathedral is impressive in its general massing and proportions, its dark grey limestone, green grey slates and glinting windows. When viewed from the school end of the Presbytery gardens, which lie to the south west, a magnificent composition is obtained: walls, buttresses and roofs intersecting and mounting in harmony to a soaring crescendo in the great tower against the sky. The main body of the Church is Revival Gothic in style and was designed by Thomas Hardwicke, who (in the apt words of Monsignor Moloney) "had the vision to steer a safe course between the cardboard stiffness and florid frills" which ruined so much church building of this period.

On close inspection of the exterior, it will be noticed that most of the detail ornament remains incomplete. Bosses, corbels and cusps remain rough blocks of stone, each awaiting creation by the sculptor's hammer and freedom from its weathered matrix. Perhaps they will wait forever, for their release, in this machine age, would be so costly as scarcely to justify the result. The lack of external ornament, therefore, the lines of wall and roofs, the absence of surrounding trees or shrubs and the far-too-extensive girth of concrete that isolates the Cathedral from all around it tend at close quarters to give the building a more austere appearance than it really possesses. In time, no doubt, this severity of the architecture will soften with the development of the surrounding roadways now proposed. We look forward also to the day when the Cathedral will grow more beautiful in a worthier setting of trees, lawns and terraces.

The observer will notice the difference in detailing between the spire and the main body of the Church. The spire, which is the more ornate in conception, was designed (to their eternal credit) by Messrs. Hennessey, the Limerick architects who succeeded Hardwicke and probably supervised the erection of the Cathedral. It's integration with the body of the Church is most happily achieved: the massive square tower rises from the intersection of the north transept and aisle to the lofty belfry and terminates in the graceful octagonal steeple. It is in the belfry that one first realises the enormous strength of the winds which seem to thunder eternally through the tall louvred arches around the great green bell. We may remark here that the great bell, which was cast in Dublin in 1883, weighs over a ton and a half. Repaired and remounted recently, its rich tone peals over the city with great power. Sometimes it seems impossible that the structure of the tower, which appears so frail in comparison with the elements, could survive their terrific buffetings. So intense is the pressure of the winds that rainwater, instead of streaming downwards, is actually blown, in a storm, upwards at this height, making normal methods of waterproofing unsuitable where they are so necessary.

The ground plan of the Cathedral is not cruciform: but for the shallow projections of the transepts it would form a great rectangle. Actually the plan resembles a squat "T" with a very wide upright (nave and aisles) and a very short crosspiece (transepts, chapels and sacristies). The overall length of the Cathedral (from the west porch to the chancel) is almost 184 feet; the overall width (from north to south transepts) is just over 124. The most noticeable feature of the plan is the proportionately great width of the aisles and nave (75 feet internally) in comparison with their length (92 feet from the interior of the west nave to the crossing). The width of the Church is due to the large span of the side aisles, which were probably widened after the change of plan. In a church of this type and size, the aisles are, normally, much narrower and lower in comparison with the nave and have "lean-to" roofs which slope upwards against the walls of the clerestory and take some of the thrust from the main roof. In cathedrals or churches where the main roof loads were large the flying buttress was introduced to transfer the thrust from these roofs over the aisle roof to the massive outer buttresses. In St. John's Cathedral, however, the large span of the aisles made lean-to roofs over them impossible and so we find that "A" shaped roofs have been used to allow for the widening of the aisles and low clerestory windows over the nave.

The "A" shaped roof, however, causes two disadvantages: Firstly, the clerestory windows are shadowed by the adjacent aisle roof, which soars high above them, so that the light in the nave is subdued. Secondly, and more serious, the "A" roof of the aisles does not relieve the thrust of the main roof upon the clerestory walls; it actually increases the strain on this wall by exerting an adverse thrust of its own. And so despite its massive strength, it is over 3 feet 9 inches thick) the great clerestory wall which is supported by the columns between nave and aisle tends to be thrust outwards by the great weight (and wind loads) of the vast main roof. Here it may be mentioned that the weight of the slates alone on the Cathedral roof is calculated to exceed one hundred tons. The unusually open con-

struction of the pitch-pine roof members distributes this thrust continuously along the entire length of the clerestory wall, pushing it outwards to its greatest extent at the centre of the run by over three feet in a ten feet height. Imagine the combination of all these factors added to the immense and sudden pressures exerted by winds on the steep roof slopes and then you will realise the great forces which have acted on these walls for almost four generations. The winds also, in a negative manner, have done much damage to the roof down the years. In a storm, a partial vacuum is formed by wind currents on the lee side of the steep roofs. Sometimes the suction rips yards of slates away in an instant, scattering them like playing cards, despite their great size, and leaving great gaps where the rain pours into the Church below.

Repairs to the roofs, therefore, are constant, costly and, from the nature of the roof construction, eventually ineffective. It is estimated that between thirty and forty per cent. of the entire roofs have been stripped and repaired to date: a labour of Sisyphus, unprofitable and unending. Recently, however, a general scheme of reconstruction and repairs has been planned by which it is hoped to remedy the ravages of time and the elements and also to enrich the beauty of the Cathedral in our own day, and God willing, for many generations to come.

—ANDREW DEVANE.

II. THE INTERIOR.

By RIGHT REV. MONSIGNOR MOLONEY, V.F.

The High Altar was a gift of Mrs. Frances MacNamara, herself a Kelly of Shannonview, where her nieces were to be generous patrons of the striking church at Monaleen, which George Goldie designed eighty years ago for Rev. Dr. Meehan. The sculptured figures on the reredos of the Cathedral altar were executed by Phyffers, the Flemish artist, who had also carved the rood-screen. In 1867, the year of the Fenian Rising and the year of the ordination of Edward Thomas O'Dwyer, Dr. Butler filled the great five-light window of the apse with stained glass as a memorial to Dr. Ryan, founder of the Cathedral, who had died four years before. The glass is excellent for its period, and probably came from a Birmingham studio. The central subject is the Immaculate Conception, a dogma which had been defined two years before Dr. Ryan laid the foundation stone of St. John's. Beneath the figure of Our Lady appears the defining Pontiff, Pius IX, before the dome of St. Peter's. About the central figures are grouped such Munster Saints as Munchin and Ita, Senan and Colman. St. Patrick and St. Bridget appear also and, of course, the Cathedral patron. St. George probably owes his position to the fact that he was Bishop Butler's name-saint, and as for St. Vincent de Paul, we know that the Society in its early Limerick years had very intimate connections with the Cathedral. The ladies of the Society still hold their annual meetings in St. Vincent's chapel, off the right transept. Inside the sanctuary rail between the Lady Chapel and St. Vincent's there stands the very gracious Madonna presented to the Cathedral in its early days by William Monsell, the future Lord Emly. Like his brother-in-law, Lord Dunraven, and his neighbour, Aubrey de Vere, he was a convert to Rome. It was in Rome that he commissioned this statue from Benzoni, who had executed the O'Connell memorial there. The lovely statue is surely worthy of a shrine all for itself.

The transept lights are identical in design and size with the window in the apse. Bishop Butler's friends, Thomas and Harriett O'Brien, of South Hill, gave the transept glass in 1881; one transept illustrates the miracles of Our Lord, the other the mysteries of the Rosary. When Dr. Butler died in 1886 the O'Briens donated all the aisle windows, as a bronze tablet in the right aisle recalls, "in memory of their dear friend, Most Revd. Dr. Butler." Conspicuous also in the