

### CHARACTER IN MATERIAL.

It was asserted in the October number of this journal that the indefinable but attractive quality which in literature we call Style, exists in architecture also; not in following any of the historic manners which we call the styles, but in the enjoyment and expression of the three practical bases of architecture, plan, construction and material. In the November number, the essential character of the building was said to reside in the plan. In last month's number, the life of the design was found in its constructive needs. We come now to consideration of the intimate connection between good detail and perception of the limitations of the material in which it is wrought. The snare of the imitative designer, who works from a model, is that he is working from outside, and is often found to be forcing upon the material he is obliged to use conditions, belonging to that used in his model. To pattern a wooden erection after a stone example, is no more good design than were the early Greek stone imitations of wooden construction. An original designer works the other way, from within outward, and finds in the requirements of plan, in the necessities of construction, and finally in the limitations of material, suggestions for form and opportunities of beauty.

It does not seem at first sight as if much success would attend the process of decorating a window with a figure subject in colour, made by piecing together, by means of lead strips, pieces of coloured glass somewhat imperfectly matched and roughly blended. But it has been found that due regard for these limitations and the fact of transparency, transforms them from hindrances to the very source and ground-work of beauty. There is no limitation which is not a source of beauty. The discovery now applied to luxfer prisms, that glass quarries can by the electrical deposition of metal between the joints, be set true to a plane, instead of, as in leaded work, at slightly varying inclinations to the light, will be no help to coloured windows if applied to them; the very variation of the greets in coloured work is one source of richness in the colour, and for plain leaded work, as in the ordinary diamond pane, it is the source of the variegated gleam which makes these windows so picturesque on the outside. This is an illustration of a principle, which applies equally to all materials: mechanical skill displayed in overcoming the conditions of a material, whether in refining them out of sight, or in making the material imitate the conditions of some other material is fatal, both to the workman who thereby ceases to be an artist, and to the work which thereby ceases to be a work of art.

Not only the short road, but the only road to good architectural detail is to work with the material and try to bring out its qualities. Wood as we use it, is a thin material from one to two inches thick as a rule. It is possible by means of raking mouldings and other processes of building up, to confuse this characteristic with the characteristics of other materials, and thereby lose one essential of beauty in design by losing the character of the material. Wood thus built up, may be said to look like wood of greater thickness, but it does not. In the first place it comes to be used in places where such thick pieces would be out of place, and the eye that is satisfied with the appearance so made, is an eye which has lost perception. But even the inexperienced eye misses the variation in grain, and the small fissures which are the marks of solid woodwork and which the eye enjoys without knowing why in old work. A certain eminent writer of Boston, who cautioned his architect's superintendent, "Do not let any fool of a painter fill up the cracks in my ceiling beams," showed a refined appreciation of the beauty of character in material. Built beams if near enough to the eye to be clearly seen, show the neatness of cabinet work, and that which in its proper place is refined gives here a curious impression of vulgarity. The same may be said of the shining surface which is now disappearing from fashion, as the proper finish for constructive wood work. We like our polished mahogany dining table whose hard and glassy

surface looks perpetually clean, and there are other circumstances in which wood that takes a polish should be polished, but the "hard oil finish" that has spoiled the colour and surface of so much good hardwood, and will keep it spoiled, is happily out of date with architects of taste.

Brick is a material of universal use, and one might perhaps say, capable of universal application if its conditions are studied. The opposite poles of its application are the enormous brick fortresses of Spain, and the commixture with stone in some of our city buildings, where there is so much stone trimming that the constructive lines are practically stone, and the brick becomes a mere surface for the spaces between. The walling of Spanish fortresses is of long thin brick with joints not less than an inch thick. Even in photographs the texture of the walling in such large masses delights the eye, and when we imagine the soft and varied colour that must be given to the brick by the large admixture of mortar, and the roughness of the joints, we see that this is the perfection of plain brick-work on an extensive scale. Build the same masses in pressed brick and the result would attract no artist. On the other hand, we could not fill in between the stone work of a first-class city building with brick-work of the old Spanish character. There is some indication here of a scale of limitation in brick-work, corresponding to the scale of fineness in the buildings in which it is employed. It is rather the character of what it is perhaps least invidious to call "swellness" in a building that limits the use of brick rather than its real dignity. The beautiful but slightly "swell" brick and marble Renaissance front with which Sir Christopher Wren so skilfully hid the whole of Cardinal Wolsey's building at Hampton Court is still beautiful, but has an undeniable air of shabbiness—a shabby gentility that does not at all affect Wolsey's far older building. This portion, which pretends to no greater dignity than a large comfortable-ness, and no finer beauty than can be executed in brick, still remains dignified and beautiful. For a building that should give evidence of wealth, brick is out of place. Brick, which is the poor man's material, must diminish and finally disappear, in proportion to the wealth of which the building should give evidence. Stone is always in place. Designers seldom go wrong in stone as far as considers the character of the material, and there is a mechanical and infallible guide to the scale of quality in the scale of cost.

Of material that is difficult to handle and that is often mishandled, perhaps iron has the least settled treatment and offers most field to the original designer. The problem would be easier if cast iron were holding its own. The purist objections that have been raised to cast iron should have been directed, not against the material but against the manner of casting it in imitation of other material. That iron can be cast is enough reason why it should be cast, and suitably moulded or modelled details are an easy task to the designer, since variations from stock cost but little to execute. But rolled iron, which we can only afford to use as manufactured on a large scale, offers difficulties on this account. There are, however, pleasing instances of open beam work, adorned only by ornamental bolt heads and angle connections. If wrought iron might be always exposed, the best advice that could be given to the designer would be to expose it and learn from experience how it can be made beautiful, and how beautiful it can be made. But the question with wrought iron is not so much how to expose it as with what to conceal it. It seems, from papers that have been read about steel building, that the problem of protecting a light structure of iron in a characteristic manner is, in spite of the hurry of practice, not absent from the minds of modern designers.

Whatever is done in this direction with good result must be the outcome not of imitative design but of an artistic appreciation of the imaginative quality that inheres in a building definitely planned for definite needs, of the vigor given by clear constructive lines and of the interest that lies in the characteristic application of material.