ANCIENT ART WORKMEN.

It is a curious and instructive circumstance, and one which illustrates the unforeseen bearings of one branch of knowledge upon another, that the surest indications of the approximate dates of Fra Angelico's paintings (where external testimony is wanting) are to be found in certain accessories, and more especially in the architectural setting which he so often introduces into his pictures. Once this key to the problem is grasped, it becomes a comparatively easy matter to trace, for instance, the progress from the Gothic framework of his earliest Annuciation to the Corinthian columns of his Cortona picture of the same subject, from these again to the imperfect classical entablature of the Madonna di Annalena, and thence forward to the full entablature with cornice, festooned frieze and architrave of the Madonna di St. Marco. It is not merely that the points of difference mark an advance from an earlier to a later period, but in more than one case the actual sculptural prototypes of Fra Angelico's canopies, which are, in fact works of Brunelleschi or of Michellozzi, can be positively dated, and thus a terminus a quo can be established, before which the particular paintings cannot be placed.

cannot be placed.

Besides his excellence as a sculptor, Lorenzo Ghiberti has other titles to fame. Not only did he design the window for the cupola of Santa Maria Florence, but he exercised so marked an influence on art in general that we are sure to find his name wherever a progress is visible. The bas-reliefs on the bronze doors of the baptistery also form an epoch in the history of painting, or at least in that of design, which he raised at once to a degree of elegance and purity to which no painter before him had approached; indeed Raphael himself did not disdam to profit from his manner of draping, grouping, and arranging his figures; and there is cause to regret that the Florentine school did not avail itself of his inspirations in preference to all others. It is to Ghiberti that we are indebted for the first history of art in Italy, a noble and patriotic undertaking, for the execution of which he united every possible advantage. Unfortunately, a fatal prepossession in favour of ancient art made him attach such an importance to the authority of Pliny and Vitruvius that the extracts from these two authors fill the greater part of his manuscript, whilst the history of modern painting only occupies a small number of pages. The sculptures of Ghiberti laid the foundations of a progress which was realised in the works of his disciples, who, like himself, had served their apprenticeship in the workshops of the goldsmiths before they assisted him in giving the finishing touches to the doors of the baptistery. The most skilful of his coadjutors was Masolmo, who understood the distribution of light and shade better than any of his predecessors, as may be seen in the famous chapel of the Carmine, where he began at an early age to paint the history of St. Peter, which death did not permit him to complete. The work was continued by Masacaccio, who interests us still more, both on account of his early death, which happened in his twenty-sixth year, and also from the more lasting and universal admiration he has excited

Thorwaldsen's career commenced in poverty and darkness; when the world came to know him he was famous. In his early years no one had an interest in the fate of the poor, ill-dressed and lank-haired boy who helped his father—a third or fourth-rate carver and framemaker at Copen-

hagen—to execute his clumsy figureheads and "gallions," or who carried a tool basket after the drunken old artisan, when that person went for some job-work to the houses of the wealthy merchants and functionaries of the Danish capital. The boy's talents, indeed, excited some attention,

Thorwaldsen, after gaining the three highest prizes for drawing composition and modelling, had to petition for a wretched pittance of £20 per annum to assist him in his studies, and that afterwards the same course of humble petitioning was gone through for the sake of the travelling stipend



RESIDENCE OF DR. F. WALLAC!' MACKENZIE, WELLINGTON--F. DE J. CLERE, F.R.I.B.A., ARCHITECT.
[Hardie Shaw, Photo.

and it was remarked that by his assistance old Thorwald succeeded now and then in carving a real lion for some ambitious merchant captain, whereas, before young Berthel Thorwaldsen grew up, the clownish old fellow spoilt all his lions and made them French poodles. But what of that? The world as it goes is far too busy with its own affairs to care much for the precocious talent of a poor artisan, especially if he have only his talent to rely on, and if, like Berthel, he wants assurance, fluency of speech, and that mixture of boldness and humility which the patrons of art value more than even art itself.

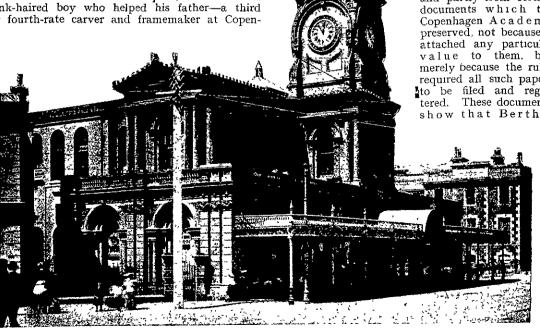
than even art itself. Hence it is no wonder that Berthel's way in the world could not keep pace with the development of his genius. His youth passed unnoticed in his father's workshop and the drawing school of the academy, and the little that is known of the boy Berthel is chiefly derived from a few anecdotes he told his friends, and partly from certain documents which the Copenhagen Academy preserved, not because it attached any particular value to them, but merely because the rules required all such papers to be filed and registered. These documents show that Berthel

of £80, to which successful young artists were entitled. The grant of this "stipend" concludes the young artist's history in his own country. Scarcely a trace is left of his career between the day of his departure from Copenhagen and the day on which his first independent works revealed him to the astounded world (that is to say, to the small part of the world which cares for such matters) as a rival of Canova.

Ancient Mint Discovered.

As the result of the structural and excavation work which is being carried out by Lord Raglan, at Castle Rushen, Isle of Man, the foundations of a minting house was disclosed recently. The sunk fireplace is almost perfect, and portions of the crucibles, with a large quantity of copper dross, were found alongside. There was also a large number of Derby coins, and it is believed that there were minted the coins which the Earls of Derby put in circulation when Kings of Man.

Increasing appreciation of the advantages of water power, alike for manufacturing and general industrial purposes, and especially for machinery propulsion, is, we are glad to know, being evidenced on all hands, for the water turbine is doing excellent service in Europe, America and Canada. It is hardly indeed too much to say that water power at the present time is unsurpassed for economy in prime cost, upkeep, and cost of management—when either breast, Poncelet, overshot wheels, or turbines are employed. When the power required greatly varies, breast, Poncelet, or overshot wheels are deemed most suitable, and when the power needed is fairly constant, when a high speed is required, or the fall is high, turbines can be used to advantage. They are now employed for falls as low as 2½ft., thereby dispelling the idea that turbines are only suitable for high falls. On the other hand, the turbine is well adapted to the modern practice of dividing the power over separate parts to reduce the loss of power, cost, wear, and oil. We notice that a writer in the Southampton Observer exclaims: "The cry has been 'Back to the land!" Why should it not be 'Back to the country, water power and a more natural and healthy life?" The idea is a good one, and would, if generally adopted, lead to the increased employment of artesian wells, turbines, pumps and other hydraulic appliances, in which, as The Review has frequently shown, English engineers excel as manufacturers, and increasingly supply.



A QUESTIONABLE IMPROVEMENT: THE STOCK EXCHANGE, DUNEDIN WHOSE FACADE HAS RECENTLY BEEN DISFIGURED BY THE ADDITION OF SHOPS AND AWNINGS. [Guy, Photo.