ercise that precise influence for the benefit of which the premium is paid. Just as a carpenter or mason is unlikely to obtain full experience and ability without the regular routine of the workshop, so the architectural student will be ill-fitted for his future practice if his training does not include some experience of office life and of the business relationships between architect, client and builder.

But there will be a great difference between the progress of a pupil who passes through his office experience when he is uninstructed in the bare elements of professional knowledge, and that one who has, before his pupilage, begins, acquired some elementary theoretical knowledge of his profession, and also, perhaps, of some of the trades it employs. If a newcomer to the study of architectural practice goes into a carpenter's or a mason's shop, and combines that with some systematic study of professional subjects at University College and at the Royal Academy, he will be filling his time to a solid advantage and will lay a foundation on which he may build with certainty of good result. He will with this foundation be of some service as a pupil and give his master asssistance worth having, such as may afford some return for the educating influence the latter can bestow. In such a system the cost of a premium would be devoted to the direct and certain education in college and in shop, and then when the pupil comes to the architect's office he is in a position to afford genuine assistance, instead of being regarded pretty much as an interloper, whose sole value to the office lies in the premium paid on his behalf.

It is, we think, open to serious question whether such a preliminary stage such as we have suggested would not operate far more to the benefit of architect and pupil alike than the present system of taking a boy direct from the restraints of school to the freer life of an office, where his labor is often of a voluntary kind, and in a very indirect way conducive to his own benefit. It is not very likely that a pupil can put forth his best efforts when he is engaged all day in a sort of office drudgery; he cannot, after a day so spent, feel the attendance at classes in the evening anything but irksome. A medical man once said to us that no student should begin the actual hard study of his profession till he was over twenty years of age, when his capacity for understanding the higher branches of knowledge would be fully developed. Before that age he thought there was a tendency to "cram." We believe there is much truth in this And if architectural pupils were thoroughly grounded in purely elementary work, practical and theoretical, before being sent into an architect's office, they would then be able to learn much more quickly and thoroughly the practical details of their profession than they otherwise would do; they would also have a more ready understanding, and both they and their masters would be the gainers.

Pupilage we have said cannot be dispensed with. It must, however, be placed on an altogether different footing if it is to be of any real educational value. We have tried the old system long enough, and it has failed completely and ignominiously as most who have experienced it know to their cost. To whom then must we look for the imitation of a more rational system? We have, we are happy to know, conscientious men in the profession who can and do recognize the responsibility which the taking of a premiated pupil throws upon them. But what of the great number who take premiums and turn loose into the profession a lot of raw, ignorant youths, who, if they have not brains and strength of will sufficient to overcome all obstacles, simply go to swell the ranks of those who claim a rank and title to which they have no manner of right?

This is a question that we feel has not been fairly answered. It may be left to the individual members to solve it in their own practice, but if individual effort could have found a more excellent way, we are sure it would have been done so long ago. We were much struck with some remarks of Professor Roger Smith not long ago, when speaking on this subject, and thought then that if every architect could be induced to think as he did about this question of pupilage, there would practically be no fear of incapable or ill-trained men entering the profession. We are persuaded that some better-defined and more united course of action is needed to reform this one of the most crying evils in the system of architectural education, as it at present exists. Cannot our architectural societies, metropolitan and provincial, take up the subject and develope some scheme of reform? In their unity on this, as in other important details of professional practice, depends the real strength and life of the profession. Let them at least agree upon certain essential qualifications in candidates for pupilage, requiring, for instance that pupils should be liberally educated, or that they should possess special faculties and capacities for overcoming pecuniary difficulties, that they should in fact be naturally inclined and specially educated for entering upon their apprenticeship. Upon this and other points connected with this subject, it is absolutely necessary we should be all agreed if we are to effect any reasonable measure of reform.—*British Architect.*

A CHAT ABOUT MODELLING.

"Mr. Hems," I inquired one day of the well-known Exeter sculptor, Harry Hems, whose studio in fair Devon's ancient capital, I happened to be visiting, "If I were a student of yours, what would be the first most important thing for me to learn? Is there any real artistic help that a master, like yourself, can give his pupil, or is it, after all, the better for a young beginner to take council only by experience, teaching himself as he goes along?"

As I said this, I gazed around me and noted the peculiar features of the *atelier* I stood in. See, there are no windows; the light is entirely obtained from the roof, and so nothing but a soft north light falls upon the work the sculptor and his assistants are so earnestly engaged upon. All around and upon the walls are grouped models of commissions already completed; life-sized saints, virgins, bishops, and martyrs are there in mute array by the score. In this corner are the pointing machines by whose help the superfluous material is knocked off the huge blocks of stone or marble ere they come into the sculptor's hands. Tram lines and turn tables are laid on the floor in every direction, and from the roof are suspended ingenious appliances by which big blocks, weighing tons in weight, are picked up and placed with ease in their respective positions. In one corner is a deep pit where a dozen or so tons of modelling clay is kept moist, ready for use; on the bankers are some colossal statues which will one day adorn the high altar screens at St. Albans' ancient abbey; and, by my side, the moving mind of all this work, is Harry Hems himself; an immense and most ferocious-looking bull dog (who he affectionately addresses as "Bob," but of whose movements I am somewhat suspicious) being his close attendant. By no means affecting the ideal artistic cut, Mr. Hems is a medium-sized, somewhat sturdy man, of between 40 and fifty years of age, who delights in being mistaken for the man, rather than the master, of the place he owns, and seems so quietly to rule. Yet if all accounts be true, Mr. Harry Hems is not always so quiet as he generally seems to be, and tales are told that when he is in his "tantrums" (as an artificer confidentially expressed it to me) "the devil himself couldn't hold him!"

But I had well-nigh forgotten that I had asked Mr. Hems his opinion as to whether practical training was really of service to the would-be student in sculpture, and that he is politely waiting, with a good-natured and open smile upon his face, to answer me.

"Undoubtedly," replied the sculptor, "a young artist can be saved a world of unnecessary, and oftentime disheartening trouble, by a few useful, practical hints from a teacher at the outset. For example, in setting up the clay for the statue he intends to model, considerable difficulty and delay, yea, much vexatious loss of time, will be incurred if primary rules are not followed. In the first place the clay must be well tempered."

"What description of clay is it?" I asked. "It is pipe clay," was the sculptor's prompt reply. "You may buy it at any pipe-makers in the kingdom for a shilling a ball; a ball being about the size of a man's head. That is the retail price and mode of procuring it; but we sculptors, schools of art masters, and others, who use large quantities, of course get it direct from the clay pits. These are situated in the immediate neighbourhood of Kingsteignton, near Newton Abbott, on the borders of Dartmoor; Modelling clay is believed by geologists to be simply nothing more or less than disintegrated and decomposed granite. There are several hundred men constantly engaged in the avocation of digging the clay, of which upwards of 80,000 tons are sent away by ship or rail every year. It lays in beds, from 20 ft. to 80 ft. deep, and varies somewhat in quality; that best suited for modelling being most free from grit, and able to take a good polish, besides being both tough and plastic when in a damp state, though not too brittle when hard. The cost of the clay wholesale is a guinea a ton, a 'tally' of 70 balls going to the ton. The rate of carriage from Newton Abbott to London by water is 5s. per ton, and £1 a ton per rail. Messrs. Whiteway and Mortimer; Messrs. Brown, Goddard, and Hatherly; Messrs. Watts, Blake, Bearne, and Co., are perhaps the best known among the clay merchants;