half the amount of the original estimate. Verily, virtue has its reward, and contractors know it.

It unfortunately happens that even though members of a building committee be ever so honest, though they may be shining lights of the church or the exchange, they hardly ever have any available knowledge, for practical purposes, of the theory or technics of buildings. Sometimes one among them may have acquired a little architectural knowledge from books, or may have built a stereotyped house of his own; may know the market price of bricks, and may have read of a little on the mixing of mortars; and he, when placed on a committee, is a terror. The ideas of such a person are always hazy. He speaks, probably, of what he does not understand, and the greatest misfortune of having such a person on a committee is that his impartial opinions are given in opposition to the architect, so his vanity is offended, because they cannot be carried out, and he becomes then a stumbling block to the progress of the works and a nuisance.

There is a great deal of confusion in the public mind as to the limitation of those who are employed to direct construction, and it is not impossible that architects themselves do something to increase the confusion in their eagerness for employment and bind themselves to

terms of excessive harshness.

There is a popular idea that the architect is somehow responsible, not only for his work, but for that of all the contractors for a building. He is supposed to be in some way capable of watching at once all the workmen employed in a structure, through the whole of their working hours, so that the mechanic who has been astute enough to conceal his bad mortar and rotten timber, during the periodical visits of the superintendent, passes for only having yielded to the impulses of nature; while the architect, who has failed to find him out, is denounced as incompetent. Perhaps in practice, want of care and diligence is more frequently imputed to architects, than want of skill; but as to the penalties for want of due care and skill, there seems to be some variations in the practice of different countries.

The French Code, sect. 1792, says: "If the edifice. "built at an agreed price, perish in whole or in part, by "faults in its construction, even by defects in its foun-"dation, the architect and builder are jointly resposible," and, in substance, that is the law of England and the United States; but the French law makes further distinctions. The architect and builder are jointly answerable for any damage that may accrue to the building for ten years after its completion, provided some damage arises from defects in construction, &c., but the French law has further decided that the architect is solely responsible for damage or failure in a building which has been strictly carried out in accordance with his plans and under his directions; if the workmanship and materials were not defective. Another decision extends the responsibility of the architect to all cases of damage which may result from a violation or ignorance on his part of the rules of art which he professes, or the laws which it is incumbent for him to know.

This is rather a hard doctrine considering that the architect is supposed to have no interest in permitting the use of bad materials, and can only wholly prevent it by extreme watchfulness.

One of the French commentators asserts the existence of an important rule, that if the superintending architect has given the proper directions for the execution of the

work; and has, before they are actually in place, pointed out the defects in the materials on hand, he escapes liability; but, then, this must be done under notarial protest. The principal then is the cause of the damage, that is, the contractor or workmen, who by fraud or negligence, has badly executed the work which was confided in him. He is the immediate cause of the damage, and should furnish the reparation. The negligence of the architect is only secondary and accessary, and he should be held as a subsidiary, as a bondsman in case of insolvency of the principal delinquent. We believe that is a point in our French law not generally understood, and there is at least some little comfort in it.

It would seem that there is no want of law to hold the architect to his duty to his employer; and if the courts set up a high standard of professional deligence and skill it must be acknowledged that the emoluments of the profession should be guided by the same rules as regards fees, that binds the members of nearly all other professions, whereas, on the contrary, the architect who will work for the lowest commission is the most patronized, and professional skill goes for ltttle. A man is not an architect who is merely a draftsman, or who can make a classical design. He may know nothing of the practice of the profession; and yet there are many such so-called architects. There are many people who think an architect is a sort of a cross between a mason and a sketcher, and that his time and labour are not guagable for practical and renumerative purposes as other men's purposes are. It is time, indeed, that employers became better educated and better enabled to place a proper estimate upon the value and skill, and the cost of rendering it upon paper for the use of his employer.

Would any man venture to offer a lawyer, notary, or physician, a set sum for his professional services, or expect him to charge less than the schedule rates adopted by each profession? Why then should architects, whose profession is one of the oldest and highest, submit to these exactions, which are perfectly unnecessary, if they would only be united and honest towards each other.

Correspondence.

F. N. Boxer, Esq., Editor, Scientific Canadian:

DEAR SIR, -Thanks for the information afforded to me in your interesting publication, THE SCIENTIFIC CANADIAN AND PATENT OFFICE LECORD. I have been a subscriber since it started and it is with pleasure that I write to inform you that every year I like it better, and from every number I receive information which more than pays me for the number.

Having served my apprenticeship in Canada, I think the paper has a claim on me, and not only upon me, but every Canadian who wishes to rise in his calling.

Yours truly.

W. H. BANFIELD.

Dominion Tin Stamping Co.

Toronto, June 10th, 1880.

We regret that the Illustration of the Suburban Residence mentioned on page 183 of the June Number, has been mislaid, and as the letter press of the magazine had been printed in advance of the Illustration, the paragraph descriptive of it had to remain.

ED. S. C.