

been in demand by architects, builders and other users of lumber. It will, in most cases, enable even a non-technically trained man to determine quite readily the wood he deals with by means of an ordinary hand lens and by comparing the wood in question with the photographs of cross and long sections given in these monographs.

PROTECTION FOR CONTRACTORS.

Apropos of the remarks made on our editorial page last week re the difficulties of contractors, Mr. M. A. Pigott, of Hamilton, has addressed to us the following:

Editor, CONTRACT RECORD:

Dear Sir,—The only class of business people in the country that have a legal disability are contractors.

Many of the contracts now under way and contemplated are probably the largest enterprises that this Dominion has yet seen, and the contractors are without any protection or remedy in case of improvidence in plans and specifications, misinterpretation or unfair decisions of engineers and architects on same and on tracts and whose views are made supreme and binding upon the contractor owing to the nature and wording of the contracts that they are called upon to sign for the carrying out of the many extensive works placed under contract.

The working man is protected under government and corporation contracts by what is called the "fair wage clause," fixing the minimum rate of wages, and also payment assured by a clause inserted providing that wages, if not otherwise paid, shall be paid out of the moneys coming to the contractor, taking precedence of all other claims.

The owners, whether government, company, or individuals as proprietors, are protected by the engineer or architect that he or they employ—the wording of the contract making him the sole arbitrator and the sole court from first to last, to which the contractor can have recourse in any dispute whatever from any cause, be it price, kind and quantity or quality of work or construction or the fixing of time for doing it as well as naming

and exacting penalties in any default which he also decides contractor has made.

Added to this is the fact that every year a greater maximum of work is demanded by the contracts that are offering, within a smaller minimum of time for the execution of same and the uncertainty of labor supply.

Money stringency or scarcity gives the banks and moneyed corporations a choice of loans that are nearly beyond the element of risk, while loaning money to contractors is accompanied by a large amount of risk, and particularly delay, in the repayment of the loan to the moneylender, depending upon the knowledge on the part of the proprietor or corporation of what he or they expect the contract covers. Depending also upon the thorough consideration and providence of the engineer or architect in first fully investigating and then explaining and illustrating the work to be done, so as to avoid misunderstandings and omissions by him in making out his approximate estimate of all works that are necessary to complete the contract as the owner or corporation intended it to be.

In almost all cases the engineer or architect is employed by the proprietor or corporation, as the case may be, as their agent, and they in turn accommodated by the engineers or architect they have employed to carry out the work efficiently and economically to their satisfaction, as their agent, which the engineer or architect is admitted to be.

To do this the engineer or architect has to keep up the efficiency of the entire work and keep down the expenses, even though items have been omitted from the plans or specifications, and, in consequence, omitted from the contractor's estimates, but notwithstanding this, have to be done to complete the work to the expectation of the proprietor and, as agent, nothing less than this will satisfy or be acceptable to the engineer or architect, and under all those circumstances the contractor finds that he has either to fight or carry out the additional works without additional remuneration, rendering himself unable to promptly repay his loan and

his debt incurred or make a decent margin for living on, as he should be entitled to do considering the immense amount of thought and labor he has to expend in carrying out his contracts.

His only hope is first, an appeal to the engineer or architect; second, an argument; third, a fight, and fourth, no Court of Appeal and no relief from the decisions of the "one man power" which the contract provides for or from the man who has been named in the contract as the sole arbitrator in all matters of dispute.

Under all those circumstances and the large number of very young men annually graduating with a theoretic knowledge only from the colleges of engineering and architecture, and the comparative scarcity of men eminent either as engineers or architects in whose hands large interests might possibly not suffer, it sometimes occurs that men without sufficient knowledge or training or desirable ethics are entrusted with the charge of affairs requiring much greater experience than they have had and for want of which frequently confusion, difficulties and loss follows, particularly to the contractor.

Under all those circumstances I suggest to contractors to wake up to the situation and ask for legislation such as will give them such protection as both themselves and their creditors are really entitled to and can rely upon.

Every other class of manufacturer or producer, where the article is portable, can retain possession and control by keeping on his premises his manufacture until a satisfactory settlement has been arranged for.

The contractor alone enters upon the premises of other people, erects and creates the structures under his contract and is powerless to take them away or hold possession of them. The lien law is only applicable under certain limited circumstances, including architects' or engineers' certificates, which may or may not issue and must precede a lien, and does not apply to enterprises covered by Dominion charter or coming under the general act for the benefit of Canada, and in all such cases the contractor is helpless.