

work and methods of performance. If he fail to do this some more progressive man will soon be in his neighborhood quietly but surely taking away his trade. In these days of active competition a man to be successful must keep abreast of the times, for the law of evolution obtains in the building trades as well as in other matters, and it is only "the fittest that survive."

A Generous Offer. THE Maharajah of Jeypore, India, has offered to supply free of charge to public institutions for the education of the young, six portfolios, containing 374 plates 15 x 22 inches in size, some in color, illustrating the most beautiful architectural work of India. The only expense will be the cost of packing and carrying charges. These portfolios may be obtained through Messrs. W. Griggs & Sons, Elm House, Hanover Street, Rye Lane, Peckham, London. Our Canadian educational institutions should lose no time in making application for these interesting illustrations.

The Utilization of Convict Labor. CANADA'S expenditures on public works have probably been larger than those of any other country of equal population and resources. These expenditures have been made for the purpose of promoting immigration and assisting the country's development. The latter object has been realized in a more satisfactory degree than the former. The government should now turn its special thought and attention to devising means of increasing by immigration the population of the country. There are yet a number of public works, the carrying out of which would tend to assist our national progress, but which cannot, at the present stage of our history, be paid for out of the public exchequer. Why should not the labor of the inmates of our prisons, who are now being supported at the public expense, be utilized for the construction of such public improvements? If the financial resources of the country forbid that these improvements be undertaken in the ordinary way, is it not advisable that they should be carried out by this only available method? No injury would be done to free labor, and the country would derive some return for the large sums of public money which are annually expended for the support of the criminal classes.

Advantages of Building in Summer. BUILDING in the country is now well advanced, and in many of our towns and villages, work that was commenced before the cold weather departed, is drawing rapidly towards completion. Country contractors generally find a lull in the building trades about midsummer, and often owners, who intend building, delay giving out their work, so that out-door operations have to be done when the weather is in an unsuitable condition. This is a factor, seldom taken into consideration in the summer, which often proves a matter of serious loss to the contractor, who should try and urge those having work to give out, to let their contracts as early in the summer as possible. Generally work taken during the winter previous to execution, is not the most profitable, as frequently the necessities of individual workmen compel them to cut prices down to almost starvation point, and as a rule, before the work is completed both contractor and owner become disgusted with the job; then comes a series of dishonest stratagems by the workman on the one hand, to beat the

owner; and a period of dissatisfaction and grumble by the owner when he discovers the knavery of his contractor. Summer jobs always pay best, and are more certain to give satisfaction all round.

If work be taken in the fall of the year to be completed the summer following, the chances are that both contractor and owner will be better served than if let under any other conditions. This would give the contractor ample time to digest his plans and to decide on the best and speediest methods of going about the work, and the owner would be better served, inasmuch as all his joiner's work would be—if the contractor does his duty—better seasoned, and in a much better condition to "stand" than if hurried from the factory to the building and put in place at once. The tendency in all our smaller towns is to "rush matters to completion," a tendency which acts injuriously to the whole building interests, and everyone engaged in these interests should set their faces against it. A good building, like a good tree, can only be the result of time naturally dispensed.

Safe Scaffolding. As the tendency of the law is to make the contractor responsible for accidents to workmen caused by defective or improper scaffolding, it should be one of the chief objects of the foreman to see that every piece of scaffolding is sound, strong and sufficient. Many a limb has been broken and many a life lost because of the use of rotten or imperfect materials, or because enough nails have not been used in making the scaffold. Every contractor should have in stock a good scaffolding plant suitable for all work he may be called upon to perform. The English method of using good stout poles instead of sawn scantlings, is to be commended, as being safer and stronger, as the fibres of the grain are continuous throughout the whole length of the pole, whereas, in scantling, cross grain and knots render them liable to snap asunder at every sudden shock or strain. In scaffolding, when round poles are used, the putlogs or cross pieces are generally lashed to the poles with ropes—sometimes with chains—and this does away with the necessity of using nails to secure the brackets, and leaves the scaffolding undamaged when the work is completed. Taken all in all this manner of scaffolding, apart from being the safest, is, in the end, much more economical than the old slovenly way of nailing.

Tamarack or spruce poles are easily obtainable in Canada, and when once prepared and seasoned, if properly cared for, will last a lifetime and be as strong in the end as when first used. Putlogs should be made of straight grained rock elm, oak or rim ash. By using either of these woods, the dimensions may be small—not more than 3" x 5", and six feet will be found long enough to have them for most purposes. The ropes used for lashing should not be more than $\frac{3}{4}$ of an inch diam. and should be laid away in a dry situation when not in use. If the building is of wood that requires scaffolding, an ordinary right-angled bracket with braces nailed on each side, may be used instead of hardwood putlogs. The stuff from which these braces are made should be for the top and back, about 2" x 5", and the braces nailed on the sides at an angle of 45° should be of good sound stuff—pine—1" x 5". The space between these braces is where the sustaining pole is inserted when the bracket is in use. The height of the