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FRASER S. KEITH EDITOR AND MANAGER

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QUANTITIES AND CONTRACTS

The method in vogue of estimating from plans and specifications, which has been in existence during the past generation, and possibly longer, is about to be superseded by a more efficient method.

No matter how many men or firms are figuring a building each takes off his own quantities and figures accordingly, and the time allowed for determining the value of work is now, generally speaking, too short. Someone has said accuracy is too often sacrificed for speed. Present methods are conducive to error and resulting complications. Estimating as it is now done

entails an immense amount of wasted time and energy, as one individual could take off the quantities ready for pricing, whereas twenty, perhaps, are doing the same work, all going over the same ground. The builder in the various lines wastes a great deal of his own time and the time of men in his employ in taking off quantities for estimating. If this wasted time and energy could be devoted to supervising actual construction work on hand, it would be much better from the standpoint of efficiency, and, incidentally, profit. The builder may not add a particular item for the wasted time and energy in an estimate, but in the overhead cost of the various buildings he does; it becomes a serious item of office expense, and therefore must be, and is, paid for eventually by the owners, although under our present methods he may never realize the fact.

It appears that we are wanting in efficient methods in this particular. Owners may pay in the end many times over for taking off the quantities of a building; this would not be the case if one well-trained person were to take such quantities off and duplicate lists of these quantities furnished to each bidder as a uniform basis upon which to figure. This would help to reduce the cost of construction in the sense that a builder would be able to devote more time to the work he has in actual progress. He would have more time and a clearer mind with which to consider the numerous questions which always arise in carrying out work; greater efficiency and less waste would result.

It would seem, therefore, that the creation of the office of quantity surveyor, licensed by the Government, or appointed by the architectural associations, is desirable; men who have special training in this work and who are responsible and competent. The plans and specifications would pass into his hands from the architect. His duty would be to prepare a bill of quantities of the various materials required for the construction of the building. This bill of quantities, with the plans and specifications to be submitted to the various bidders who are to figure the work. The plans and specifications to indicate the conditions under which construction will take place, height of building, character of work, etc., and the bill of quantities to indicate the quantity of materials of all kinds which the successful bidder is expected to furnish. The bill of quantities should be made the basis of the contract entered into between the builder and the owner. Should more materials be required the builder to be paid for same at his own unit rate, and if less materials are required, the same to be deducted from the contract at the unit rate. This would result in a great saving of energy and time now wasted, and result in a better understanding between all parties.

Some builders seem to be opposed to change