## H. W. Nelson's Plan of Payment for Estimating

Rules and Procedure Whereby Each Project is Considered Separately—Fundamentals to be Observed in Estimating—Statement Submitted by Mr. Nelson to Committee on Methods of the Associated General Contractors of America

ESTIMATING costs and establishing prices is an overhead expense involved in any merchandising, but the cost of doing so is generally nominal, if not insignificant, and can be justifiably distributed. The cost of figuring or estimating work to be performed in accordance with special specifications to meet each case, however, differs materially from establishing a price on each of a thousand hats, all made from the same material and from the same pattern. The Nelson Form for Choosing Bidders and Awarding Contracts has, therefore, been suggested to meet special conditions; to more justly distribute the cost of competition and estimating, and to make each project bear its own proportion of the cost.

It is submitted with the thought that there are three main factors entering into the relations between the pur-

chaser and the seller, viz .:-

1. Quantity and Quality of Materials.

2. Character of Labor and Personal Service.

3. Price to be Paid for Both.

The first factor can be determined and somewhat definitely set forth in the form of plans and specifications to be furnished by the purchaser to the seller, upon which the seller can base his price.

The character of the labor and personal service rendered by the seller or expected by the buyer varies as much as human nature varies, and cannot be so definitely or exactly

set forth.

The price, or third factor, can be based definitely upon the materials, but must necessarily vary upon the Personal Service, depending upon the value placed upon it by either

the seller or the buyer; therefore-

The purchaser should be allowed to exercise his recognized personal liberty in choosing the party with whom he wishes to enter into a contract, basing his choice upon price, his own confidence in the seller, his own judgment of the seller's qualifications or experience necessary to render the service he wants, or any other factor that he may himself consider most important.

And when the purchaser desires competition to enable him to make comparisons or decisions based upon a combination of all three factors, competition which involves labor and expense on the part of the seller, then the purchaser shall purchase that competition at a fair and just

Price, just as he purchases anything else.

## Fundamentals in Awarding Contracts

Under the Nelson form of choosing bidders and awarding

contracts, it is the intent:-

First—That the buyer may have just as much fair competition as he wishes to pay a reasonable and fair price for; that he, alone, desires the benefit of competition, and that no one buyer should pay for competition received by another—an abuse that exists under present methods.

Second—That when and after the buyer has chosen his competition in a fair, unprejudiced manner, and has further paid a just and reasonable price for said competition, he shall be under no moral or other obligation to the bidders; that he may make his own decision, based upon his own opinion of the qualifications of the bidder or the bidder's

price, or a comparison of both.

Third—That the buyer may, as he chooses, select a limited or large number of bidders. If the work is of a private nature, he may wish to choose a very limited number, if he wants competition at all. If the work is of a public character, he may necessarily wish to give every qualified public citizen bidder an opportunity to compete, but without the necessity of paying more for the competition than he may consider the competition is worth.

Fourth—If the work be of a public nature, the buyer may have good reasons for first selecting a limited number

of bidders because of their residence near the work to be done, or because they may be familiar with or may have had previous experience with the work, or for sundry justifiable reasons.

Fifth—That when the buyer, in case of public work, has then chosen his preferred bidders, he may give every other public citizen who is qualified to bid an opportunity to compete by chance or lot for consideration as a bidder, limiting the number to be chosen in accordance with the value of the

competition to him.

Sixth—That the bidder shall in no way be considered as an engineer, but solely in the light of a bidder and contractor capable of doing work in accordance with complete plans and specifications; and that, therefore, in every case where bidders are expected to bid in competition, they (the bidders) shall be furnished by the buyer with plans, specifications, drawings and instructions covering the work to be performed as completely and specifically as commercially possible, with sufficient details to enable a bidder to fully understand what he is expected to figure and bid upon.

Seventh—That if a buyer cannot or will not provide complete detailed plans and specifications for the work, but wants estimates, measurements, figures or advice of a professional nature, then he (the buyer) shall consider such work in the light of a professional service, and it shall not be considered proper, fair or just to ask for competitive price bids, but that the charges for such professional service shall be left solely and strictly for adjustment between the buyer and seller, either before or after the work is done. Approximate estimates shall not be considered binding upon either party involved.

## Reducing the "Gamble" to a Minimum

That under no circumstances shall the amount of a competitive bid be altered or the intent of the bid be changed so as to equivalently alter the amount after the bid has been submitted and before the contract has been let.

That no reductions or additions shall be made in bids for the purpose of meeting lower bids or because of proposed changes in plans and specifications. That under such proposals by the buyer, either new bids, based upon new plans and specifications, shall be asked and paid for—or—the contract shall be let and mutually satisfactory arrangements then made between the buyer and seller. That what is now known as "shopping" or "peddling" bids shall be discoun-

tenanced by both buyer and seller.

Such a system would place the expense of estimating where it belongs, i.e., as an expense against the job for which it is incurred. It would place the owner or architect under obligation to no one. He could, with fairness to all, let the contract to whomever he chose. The contractor could thus eliminate much more of the "gamble" in bidding, which would, in turn, benefit the material dealer and manufacturer, the bonding companies, and the bankers. The fact that owners and architects could choose their contractors as they saw fit without obligating themselves to choose the lowest bidder should not operate to increase graft or unfair discrimination. Crooked building committees or architects are the exception and very far from the rule, and there would not be any occasion for private owners to select contractors except on merit. Let the best man win, everything considered, not price only. At any rate, the possibilities for graft under such a system are not as great a menace to contracts as the evils of present-day competition and wasteful estimating.

## Quantity Survey and the Nelson Form

The "Nelson Form of Choosing Bidders and Awarding Contracts" should not be construed as conflicting with the "Quantity System" or "Unit Systems." The Nelson Form