



[THIS DEPARTMENT IS DESIGNED TO FURNISH INFORMATION SUITED TO THE REQUIREMENTS OF THE BUILDING TRADES. READERS ARE INVITED TO ASSIST IN MAKING IT AS HELPFUL AS POSSIBLE BY CONTRIBUTING OF THEIR EXPERIENCE, AND BY ASKING FOR PARTICULAR INFORMATION WHICH THEY MAY AT ANY TIME REQUIRE.]

Estimating Mason Work.

In making estimates for wrought stone-work, or stone-work in the wall, the following conditions must be considered. For plain ashlar walling and paxwint walling, the measurement must be super, net, for stuff and labor, the kind of face and average sizes of stones, and bed considered, and allowance made where square blocks must be cut to suit shape of openings, moulded or ramped to form curves. Reveals are always measured extra. Rubble walling up to 18 in. in thickness is generally measured superficial, or it may be measured cubic, as all over that thickness is. Other masonry is usually measured as described, labor and materials being kept separately, or when conducing to a better understanding of the work, as in strings and similar work, labor and material may be "figured" up by the running foot, making due allowance for work and number of joints, counting the ends, quoins and mitres. Work on chimneys, cornices, towers, spires, etc., requiring special appliances for hoisting, or at any considerable heights, or of extra dimensions, to be kept separate so far as material, hoisting, and setting are concerned, the labor of cutting being added whether being done by the day or by piece work. The cost of cutting and finishing mortising for lewis, bolts, etc., can only be estimated when the style of work and character of stone is known. The use of hoisting appliances of any kind must be charged for, according to the cost of such machines and the expense of running them, whether by hand, horse-power or steam. When measuring drawings for stone-work ample allowance must be made for cutting, so that each stone will exceed net dimensions from one to three inches in all its dimensions. This is an important item. In estimating for labor alone, the beds and joints of each block should be measured and accounted for, and where courses are similar, one accounting will serve for all. Where a number of window or door openings are alike, the figures for one window or one door opening will answer for all similar windows or doors. The various styles of work should be classified under different heads, and charged for accordingly, whether it be borted, tooled or polished, sunk, moulded, weathered, sunk and weathered, straight, raking, single or double curved, raised or sunk panelled, or plain. All circular work should have the material charged up as square blocks having sides equal to diameter of the work if such are columns, capitals, finials or other similar work. Segment work will require square blocks as large as the plan and section of the segment. Work to be paid for by "face measurement" should be girthed with a tape-line taking in all projections and indentations, and all corners should be taken at their greatest dimensions.

Where a wall has two faces, that is, both sides finished, extra allowance must be made, if wall is built per cubic foot; if built by "face measurement," then both sides of wall must count. Holes left for flues or for timbers of any kind should be charged for, as much time is spent in laying off and building in. The setting of window and door frames with the bedding thereof must be considered, and charged up in accordance with their size, style, and position in the building. Window and door sills vary in size and style, and this must be seen to, the actual size and style ascertained before price is determined, when each kind may be figured on separately. Tracery or other intricate work should be considered separately, as the labor on such work nearly always exceeds the cost of material and requires more costly skill to execute each piece or class should be estimated by itself, independent of its surroundings. Columns should be girthed for circular work, with or without entasis, as the case may be, the latter being more costly than if parallel or straight taper, and flutes, for the labor, should be measured lineal, and number of stops counted and charged for; if of an extra length, an additional percentage must be added to the cost. Cramps and dowels must be charged up, with average size and weight when of metal, and for labor and material if of wood or cement. Copings, when worked out of flags or thin stones may be measured lineal, or net when in place, including labor, cement, material and setting. Stairs or stone steps, with newels, balusters, and rail may be counted as complete, or they may be counted at so much per step, with rail, newel and balusters included, and all labor and material included. The cost, will of course, depend very much on the style and character of the work, which the estimator must consider. Landings, half or quarter spaces, or rests of any kind in stairs, may be measured per cubic foot which may include all joints worked, edges, soffits, mouldings, bases, plinths or other work, or they may be measured super with extra amount added to cover foundations, and other hidden work. It is better perhaps, to measure cubic and charge per foot. Mason work generally requires very minute sub-division in taking measurements for estimating, and an intimate knowledge of the various methods of working stone, in order to get at anything like a fair estimate of the cost of any piece of work that is enriched in any way. Each necessary operation of the workman should be taken into account, although it may appear that the same surface as in panelled and carved work, has to be measured more than once for different descriptions of work. The correctness of an estimate for stone work where there is much enrichment, will depend altogether on the knowledge of masonry possessed by the estimator, and