#### MEASUREMENT OF STONE.

There is no more prolific source of trouble to a quarryman than the measurement of his product. It is extremely difficult to measure rough stone accurately. No two men, if actuated by no motive but to get accurate results, will measure a lot of rough stone alike. They may closely approximate as to grand totals, but they will differ considerably as to each separate piece. How much more apt, then, are two men to disagree when one is selling and one buying on the measurements made? Every inch lost to the quarryman means lost rock, lost labor and excessive freight paid. To the mason that inch gained is all profit and therefore an object worth fighting for.

To eliminate this uncertainty as to measurements. This chance of turning a narrow margin of profit into an ugly loss and to get paid for what stone is actually shipped, has been the subject of much thought and discussion among quarrymen, but as yet without result. It is doubtful if quarrymen can ever be made to agree and insist on one rule for measurements, such as hold among lumber dealers, brick manufacturers and manufacturers of other building material. A rule governing the measurement of stone might apply satisfactorily to one class of rock and yet work a very great hardship to one operating in a different kind of stone. Naturally such a rule could not be enforced.

The suggestion made some time ago of selling stone by the ton would be a good thing for the quarryman, but it could not be carried out in practice. Its particular and fatal fault is that it would put a premium on poorly scabbeled stone. Riprap and hand rubble stone might be sold that way, and is in some localities, but with this class of rock the conditions are not the same as with bridge rock. With these kinds of rock everything goes into the work and, knowing the weight of the stone per foot, any contractor can readily calculate his prices when buving by the ton. But with bridge rock the case is different. This stone must be cut and the rougher the stone comes the heavier the waste and the greater the cost of labor of cutting. Buying by the ton a masonry contractor would be at a loss to know what the rough stone was costing.

Wall, or engineers' measurement, seems to be a fair method of buying and selling stone, but is not fully satisfactory. Contractors object to paying for the gain of the stone in the wall even though the price is made with this gain taken into consideration. As for the quarryman he will find that the stone is wastefully used and that coping and other dimension stones are used as backing, or anywhere in the place they were quarried to fit, necessitating much quarrying of costly pieces. He will find, too, that no effort will be made

to check up the material on hand, and unless he is very watchful he will have a quantity to ship back to the quarry on completion of the work.

This leaves but one method, to measure on the cars at the quarry. If the stone are measured by a skilled cutter and reasonable allowance made, not only for squarring the stone but just a little more for good measure's sake, and the dimensions are marked on the stone, a quarcyman is pretty sure to get paid for what he charges out. Couple with this arrangement a strict agreement with the contractor, that in case a stone does not measure out that it be set aside and be measured by the quarryman and contractor, or their representatives, jointly, and in case such stones are not set aside the measurement charged at the quarry to stand. Such an arrangement as this will prevent a stupid foreman, an overzealous clerk or a dishonest contractor from cutting the measurements to suit themselves, and with an honest contractor, will recommend itself as a plan for adjusting any errors in an amicable and expeditious manner.

Errors are more apt to be made by the contractor than by the quarryman. At the quarry it is part of the daily routine for a man, selected for his skill, to measure stone. With the contractor, a clerk, a foreman or any handy man who happens to have the time is sent to measure up the stone on its arrival, and no one can be found responsible when flagrant errors are proven.

It seems to be the almost universal practice among contractors to cut the quarry measurements. Not because they are wrong, but because it has grown to be such a common practice that it seems to be expected. This practice comes from the fact that not many quarrymen can afford after making heavy shipments to wait an indefinite time for their money, and rather than bring the offender to book by taking the matter to court they settle on almost any basis offered. This sort of thing should not be allowed but should be relegated to the shelf with the bakers' dozen and other antique practices of that sort. If the quarryman will study his customer and keep his business well in hand there is no reason why he should always be assessed by the contractor without chance of recourse. F. C. Neeb, in Stone.

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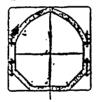
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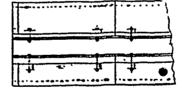
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