

## Method of Using the First Series of Tables.

### EXAMPLE.

Suppose in a Railway cutting, with a base or road bed of 22 feet, and side slopes of  $1\frac{1}{2}$  to 1, at one end of a hundred feet station, the cutting is 5 feet, at the other end 27 feet, look in Table No. 2, page 14; place a finger on 5 in the first column, another on 27 in the horizontal column at the head of the Table; move the first finger horizontally, and the second downwards until they intersect, at which place you will find 2950, the actual cubic yards contained in a cutting 5 feet deep at one end, and 27 feet at the other, and for a length of one hundred feet—this example holds good for all the Tables in this Series.

The above exemplification of the practical use of the Tables speaks for itself. Observe, all that is necessary to be known is, the width of road bed, the ratio of side slopes, and the two end depths, and you have by aid of the Tables, and by *inspection only*, the TRUE CUBIC QUANTITIES contained in each 100 feet station.

If the end depths or heights are in feet and decimals, the usual mode is to *take the nearest foot*, if the depth of cutting at one end is 5.2 feet, and at the other end 27.8 feet, look upon them as 5 feet and 28 feet, and take out the cubic yards from the Tables accordingly.

If it becomes necessary, from irregularities in the ground in the direction of the line of the Railway, to take levels nearer together than 100 feet, only the same proportional parts of the cubic yards are to be taken from the Tables.