

under line three places to the right and subtracting), and the thing is done, and *vice versâ*.* Suppose now the same length stated in French metres, and we would ascertain what decimal fraction it is of a quadrant of the French meridian. The number of metres assigned must be divided by 8194 either by a long division sum or by the use of a table, before the proper number to be subtracted can be found. Which then is the shorter process? and which, both scientifically and practically, the preferable unit?

(30.) If we are to legislate at all on the subject then, the enactment ought to be to increase our present standard yard (and of course all its multiples and submultiples) by one precise thousandth part of their present lengths, and we should then be in possession of a system of linear measure the purest and most ideally perfect imaginable. The change, so far as relates to any practical transaction, commercial, engineering, or architectural, would be absolutely unfelt, as there is no contract for work even on the largest scale, and no question of ordinary mercantile profit or loss, in which one *per mille* in measure or in coin would create the smallest difficulty. Neither could it be doubted that our example would be

* Strictly speaking for the conversion and reversion we should *subtract* one 999th and *add* one 1000th. But the difference is only one part in a million which can never be of the slightest importance. *Per contra* the conversion of the metre according to the process here stated leads to a result which, though exact in parts of the *French* meridian, is erroneous in parts of the *mean terrestrial* meridian by a considerably larger proportional part, and *this* is what we really want to know.