euclidian from non-euclidian geometry.* Or, more directly, we might adopt the really sensible assumption of Clavius, that the " line of equal distance" is straight. Or, again, we might assume that it is possible to construct a rectangle; remarking that if three sides be constructed, the fourth must be either greater than, or equal to, or less than the base, and that the simplest system, that of equality, is chosen because of its conformity with universal consent. It might also be said that that system is the only one consistent with the received idea, that if a solid be moved along a straight line without revolving, all points of it describe equal distances ; for if this be admitted, it follows that two perpendiculars to the same line are everywhere equally distant.

Morristown, October 18, 1892.

## A NEW LOGARITHMIC TABLE.

Tables des Logarithmes a huit décimales des nombres de $1 \grave{\alpha}$ 125000, et des fonctions goniométriques sinus, tangente, cosinus et cotangente de centimiligone en centimiligone et de microgone en microgone pour les 25000 premiers microgones, et avec sept décimales pour tous les autres microgones. Par J. de Mendizabal-Tamborrel, Ingénieur-Géographe. Paris ; Hermann, 1891. Folio, pp. 320.

In this folio volume, piously dedicated to the memory of Le Verrier, is contained a very extended table of logarithms, differing materially from any of its predecessors. The unit which the author has adopted for decimal subdivision, in place of the degree, is not the quadrant, or unit of the recent eight-figure tables issued by the French government, but the entire circumference. The author considers this unit more logical, and instances two advantages peculiar to it. These are, first, that the unit of measure for time being the day, the corresponding unit for angle should be the whole circle, and secondly, in the case of angles exceeding the circumference, the trigonometric functions can be found by using simply the fractional part of the angle. The author proposes the name gone for his unit, and adopts the symbol $\gamma$ to represent it. The lower units will then be décigones, centigones . . . microgones, the last being $1 / 1000000$ of the circumference, and equivalent to $1^{\prime \prime} .296$. The first table gives eight-figure logarithms for

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[^0]:    * Referred to as "the axiom of similars" by Sir Richard Ball in the article " Measurement" of the Encyclopadia Britannica. The axiomatic character of geometric proportion is urged strongly by De Morgan, in the article "Proportion" of the Penny Cyclopcedia.

