

Mr MACKAY drew attention to the connection between the theorem of the so-called Simson line, and another theorem rediscovered* by Professor Wallace about 1797, stated in Leybourn's *Mathematical Repository*, old series, vol. I, p. 309, and proved in vol. II., p. 54. The theorem is—If three straight lines touch a parabola, a circle described through their intersections shall pass through the focus of the parabola. Professor Wallace, in his proof, draws perpendiculars from the focus on the three tangents, and shows that the feet of the perpendiculars lie on the tangent at the vertex; in other words, that the tangent at the vertex is the so-called Simson line, which corresponds to the focus.

Mnemonics for π , $\frac{1}{\pi}$, e .

By J. S. MACKAY, M.A.

The following mnemonics, with one exception, consist of verses or sentences such that if the number of the letters in each word be written down in the order in which the words occur, the desired value will be obtained.

π .

The value of π to 30 decimal places is got from the quatrain (of whose age and authorship I am ignorant):—

*Que j'aime à faire apprendre un nombre utile aux sages !
Immortel Archimède, artiste ingénieur,
Qui de ton jugement peut priser la valeur ?
Pour moi ton problème eut de pareils avantages.*

In these alexandrine verses the metre and the rhyme are good enough, but the sense is not very brilliant.

Another version consists of only three lines:—

*Que j'aime à faire apprendre un nombre utile aux sages !
Glorieux Archimède, artiste ingénieur,
Toi de qui Syracuse aime encore la mémoire.*

* It was first given in Sectio I., § 15 of I. H. Lambert's *Insigniores Orbitae Cometarum Proprietates, Augustae Vindelicorum*, 1761.