

105.

CORRECTION OF THE POSTSCRIPT TO THE PAPER ON
PERMUTANTS.

[From the *Cambridge and Dublin Mathematical Journal*, vol. VII. (1852), pp. 97—98.]

MR SYLVESTER has represented to me that the paragraph relating to his communications conveys an erroneous idea of the nature, purport, and extent of such communications; I have, in fact, in the paragraph in question, singled out what immediately suggested to me the expression of the function $6abcd + 3b^2c^2 - 4ac^3 - 4b^3d - a^2d^2$ as a partial commutant or intermutant, but I agree that a fuller reference ought to have been made to Mr Sylvester's results, and that the paragraph in question would more properly have stood as follows:

"Under these circumstances Mr Sylvester communicated to me a series of formal statements, not only oral but in writing, to the effect that he had discovered a permutation method of obtaining as many invariants—viz. commutative invariants—by direct inspection from a function of any degree of any number of letters as the index of the degree contains even factors; one of these commutative invariants being in fact the function $ace + 2bcd - ae^2 - bd^2 - c^3$, expressible, according to Mr Sylvester's notation, by $\begin{pmatrix} a^2, & ab, & b^2 \\ a^2, & ab, & b^2 \end{pmatrix}$; and, according to the notation of my memoir in the *Camb.*

Phil. Trans., supposing $00 = a$, $01 = 10 = b$, $02 = 11 = 20 = c$, &c. by $\begin{vmatrix} 00 \\ 11 \\ 22 \end{vmatrix}$."

Mr Sylvester and I shall, I have no doubt, be able to agree to a joint statement of any further correction or explanation which may be required.