$$(i+j-1)!W_{i+j,0} = - \begin{vmatrix} Q_{10} & -1 & & & & 0 \\ 2Q_{20} & Q_{10} & -2 & & & 0 \\ 3Q_{30} & 2Q_{20} & Q_{10} & -3 & & 0 \\ \cdot & & & & & \cdot \\ \cdot & & & & & \cdot \\ \cdot & & & & & \cdot \\ & & & & & -(i+j) \\ (i+j)Q_{i+j,0} & \cdots & & & & Q_{10} \end{vmatrix}$$

with a similar expression for $W_{0,i+j}$.

11. *Conclusion.* It hardly seems necessary to give numerical examples of these expansions. As in the case of recurrents, from expressions of such generality any desired example may be derived by a mere substitution of numbers for letters in the general formulas. The quotient of two polynomials, the reciprocal of a series or a polynomial, for example, are included as special cases.

It appears from the expressions for Z_{21} and Z_{12} in §7, that a further immediate reduction of the order of the determinants (17) is sometimes possible; but to explicate this reduction in the general case would be to mar the simplicity and symmetry of our developments.

In conclusion I should like to thank Professor E. T. Bell for criticism and suggestions in the writing of this paper.

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A CORRECTION

In the paper by H. W. March, *The Heaviside operational calculus*, this Bulletin, vol. 33(1927), on page 312, in the line following equation (2), change "*negative*" to "*positive.*"