$$\tau = 1 + \Delta^2,\ \sigma = 2\beta_1\gamma_0,\ \rho = 2\nu\beta_1\tau(-\beta_1),\ \gamma = \gamma_0 = -\beta_1^2.$$

But $2\beta_1\gamma_0 = -2\xi^3$, $\rho = \eta$ and we may evidently choose a new basis with $\gamma = \gamma_0$ replaced by -1. Hence $B \times C$ is a division algebra. Moreover $\gamma_0 = -\beta_1^2$, $\gamma_0^2 = \beta_1^4$ is the norm of the scalar β_1 in $F(x)$. *For this cyclic algebra the Wedderburn norm condition is not satisfied and yet the algebra is a division algebra.*

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AN ACKNOWLEDGMENT

BY G. W. STARCHER

Since the publication of my article entitled *A note on geometrical factorial series* in the June issue of this Bulletin,* my attention has been called to the fact that most of the results of that paper are not new and have been previously given by F. Ryde.† Ryde considers a series which is essentially the same as (1) and calls it a "geometric factorial series." The term *geometric factorial series* was suggested to me by the fact that Cauchy had called the denominators of the terms in the series (1) *geometric factorials.*‡ Later *geometric* was changed to *geometrical.*

The conclusions in §2 are given by Ryde (page 6) and the comparison of (1) and (2) was evidently known to him. The theorem in §3 is proved in essentially the same way by Ryde (pages 6–8), and on page 8 a more general expansion is given. On pages 11–13 he employs the multiplication of such series, and he probably had formulas for the coefficients in such a product.

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* This Bulletin, vol. 37 (1931), pp. 455–463.

† *A contribution to the theory of linear homogeneous geometric difference equations (q-difference equations)*, Lund dissertation, published by Lindstedts Univ. Bokhandel (1921).

‡ Encyclopédie des Sciences Mathématiques, vol. I, 4, p. 279.