ERRATUM

A Correction to "The Propagation of Schroedinger Waves in a Uniform Field of Force." G. BREIT. Vol. 32, p. 273 (1928).

In my paper having the above title I have made a mistake in the sign of α/β as used in formula (9). A simple way of seeing that the sign is wrong is to write $\zeta^{1/2}J_{1/3}(\frac{2}{3}\zeta^{3/2})$ and $\zeta^{1/2}J_{-1/3}(\frac{2}{3}\zeta^{3/2})$ as power series in ζ . The first is of the type $a_1\zeta - a_4\zeta^4 + a_7\zeta^7 - \dots$ and the second is similarly $a_0 - a_3\zeta^3 + a_6\zeta^6 - \dots$ where all the a_i are positive. For negative ζ the first series contains only negative terms while the second has all terms positive. Both series become infinite and therefore $\alpha/\beta = -1$ cannot be right. The correct value for α/β is $+1$.

The correction changes formula (13) into $K = (J_{-2/3} - J_{2/3}) / (J_{1/3} + J_{-1/3})$. The result for the phase is that the peculiar kink in the curve of ϵ against κ disappears. I obtain now for

$\kappa = 0, 0.2, 0.4, 0.6, 0.8, 1.2, 1.6, 2.0, 6.0, 8.0$

$\epsilon = 90^\circ, 35.9^\circ, 18.2^\circ, 5.0^\circ, -5.9^\circ, -27.3^\circ, -47.5^\circ, -68.7^\circ, -298.5^\circ, -413.1^\circ$

For large κ the asymptotic behavior of ϵ is $\epsilon = -\kappa + 45^\circ$.