Corrigendum

Wave Propagation and Electromagnetic Shock Wave Formation in Transmission Lines.

by A. Jeffrey, J. Math. and Mech., 15 (1966), 1-13.

The starting point of the second paragraph of Section 4 should, of course, be equations (3.3) and (3.4) which are valid for C = C(v), and not equations (3.5) and (3.6) as stated. Equations (4.1a, b) then become

$$\sqrt{\frac{L}{C}} \frac{di}{dt} \pm \frac{dv}{dt} = 0$$
 along $C^{(\pm)}$

and equations (4.2a, b) become

$$\sqrt{\frac{L}{C}}i_{\alpha}+v_{\alpha}=0$$
 along $C^{(+)}$

and

$$\sqrt{\frac{L}{C}} \; i_{eta} - v_{eta} = 0 \;\;\; ext{along} \;\;\; C^{ ext{(-)}} \, .$$

The Riemann invariants $r(\beta)$ and $s(\alpha)$ corresponding to equations (4.3a, b) are then defined by

$$i + \int \sqrt{\frac{C}{L}} dv = r(\beta)$$
 and $i - \int \sqrt{\frac{C}{L}} dv = s(\alpha)$.

Finally, equations (4.4a, b) are replaced by

$$\int \sqrt{\frac{C}{L}} dv = \frac{1}{2}(r(\beta) - s_0) \quad \text{and} \quad i = \frac{1}{2}(r(\beta) + s_0)$$

and, thereafter, the argument proceeds as before.