

$$a = \sqrt{-\frac{u}{2v} \pm \sqrt{\frac{3}{2v}(S-l) + \left(\frac{u}{2v}\right)^2}} \quad (15)$$

A combination of equations (2), (3) to (10) results in:

$$\left. \begin{aligned} D &= \frac{q_1}{q_2} \lambda_1 + \lambda_2 + \lambda_3 + \lambda_4 \\ C &= \frac{q_1}{q_3} \lambda_1 + \frac{q_2}{q_3} \lambda_2 + \lambda_3 + \lambda_4 \\ B &= \frac{q_1}{q_4} \lambda_1 + \frac{q_2}{q_4} \lambda_2 + \frac{q_3}{q_4} \lambda_3 + \lambda_4 \end{aligned} \right\} \quad (16)$$

If these values of  $D$ ,  $C$  and  $B$  are substituted in equations (11) we find  $n$ ,  $m$ ,  $p$ ,  $v$ ,  $s$  and  $t$ , and consequently we have in (12) six simple equations for determining the last six unknown parts. These are:  $b$ ,  $f$ ,  $x_2$ ,  $x_3$ ,  $x_4$  and  $a$  or  $x_1$ , according on which preliminary supposition the calculation was based. If originally the deflection of the guide wire was assumed, we know the length  $S$  and find ( $a$ ) from equation (15) then (16) gives the unknown deflection  $x_1$ . If, on the other hand,  $x_1$  is known at the beginning, we find ( $a$ ) from equation (16), and  $S$  by substituting its value in (1a).