

20. If  $O, O', O''$  are points such that  $P, P', P''$  are collinear, then we have

$$\Sigma l''mn[m''n' - m'n''] = 0.$$

21. If  $P, P'$  are inverse points, the equation (vii.) is satisfied by the cubic

$$\Sigma \left( \frac{m-n}{a^2l} \right) = 0 :$$

a value is

$$\frac{1}{l} : \frac{1}{m} : \frac{1}{n} = \lambda^2 - 2b^2c^2 : \lambda^2 - 2c^2a^2 : \lambda^2 - 2a^2b^2.$$

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### An Arithmetical Problem.

By Dr WM. PEDDIE.

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