After describing Newton's method, Cayley writes, concerning a polynomial with roots A,B,C... in the complex plane:

> *The problem is to determine the regions of the plane such that P, taken at pleasure anywhere within one region, we arrive ultimately at the point A, anywhere within another region we arrive at the point B, and so for the several points representing the root of the equation. The solution is easy and elegant for the case of a quadric equation; but the next succeeding case of a cubic equation appears to present considerable difficulty.*

This paper of Cayley's was the starting point for many future investigations.