and if the point-charge be then brought to S, QR - PQ will represent the (positive) density at the point Q. This density will be negative from A to F, at which latter point the total density is zero. If the whole figure be rotated about OS, F will trace out the line of no force. For the data given, the angle FOS is about  $56\frac{1}{4}^{\circ}$ , and if the tangent from S touch the circle at T, the angle SOT will be about  $53\frac{1}{4}^{\circ}$ .

Note P, Art. 486. **Discontinuity.** The result in Ex. 8 is interesting as it exhibits a discontinuity. The difficulty thus introduced would disappear if we supposed the value of K to be continuous but to change rapidly from K to K'. See some brief remarks on this subject in chap. XIII. of the second volume of the Author's treatise on  $Rigid\ Dynamics$  (Art. 620 of the fifth edition).