sent the (positive) F, at which latter about OS, F will FOS is about 56‡°, ill be about 53‡°.

interesting as it disappear if we com K to K'. See nd volume of the ion).

## INDEX TO ATTRACTIONS.

## The numbers refer to the articles.

AIRY. Clairaut's theorem to a second approximation, 304, note. BERTRAND. Relation of force to the curvatures of level surfaces, 128. BIANCO. Remarks on the history of "potential," 39, note. BIOT. Terrestrial magnetism explained by a central magnet, 335.

- CAPACITY. Electrical, defined, 371. Condensers, 417. Several cases, 418, 419, &c.
  Capacity found by inversion, 432. Specific inductive capacity, 371, 473.
  Effect of a change of dielectric, 474, 483. Plane, cylindrical and other condensers, 417, 419, 478, 479, 484, &c. Spheres, &c., 486.
- CENTROBARIC BODIES. Defined, 137. The fixed point is the centre of gravity and every axis is a principal axis, 137. The law of force is the inverse square or the direct distance, 137. The boundary of the body is a single closed surface and the centre of gravity is inside, 140, 141.
- CLAIRAUT'S THEOREM. Expression for gravity, 304. Potential at any external point, 307. Second approximations, 309.
- CONDENSERS. Green's solution, first and second approximation, 417. Examples, 392, 418. Cylindrical condenser, 419, 479. Energy of condensers, 447. With dielectrics, 494.
- CONDUCTOR. Defined, 366. Conductor with a cavity, 386. Two conducting spheres, 374. Ellipsoid, 376. Disc, 382. Rod, 385. Concentric spheres, 392. Sphere acted on by a point-charge, 397; diagram, page 365. Cylinders, 407, &c. Nearly spherical conductor, 420. Enclosed in a nearly spherical shell, 421. A nearly spherical solid of revolution in a uniform field of force, 421, Ex. 4. Spheres intersecting orthogonally, 423, 436, and at an angle π/n, 433. Theory of a system of conductors, 438, &c. Mutual potential energy, 446. Junction of conductors, 448. Introduction of a conductor, 449.

CONES. Attraction of sections at the vertex, 25.

 CYLINDER. Various problems, 24. Infinite circular cylinder, attraction at any internal or external point, 55, 56. Heterogeneous cylindrical shell, 58.
 Elliptic shell, 72. Solid elliptic cylinders, 232, &c. Potential of an elliptic cylinder, 237. Potential of a heterogeneous cylinder, 333. A magnetic cylinder and the magnetism induced in any field of force, 333.

CYLINDER OF RODE. Limiting case of a cylinder and consideration of the resulting discontinuity, 52.

DARWIN. Clairaut's theorem to a second approximation with references, 304, note. DICKSON. Potential of a circular ring, No<sup>\*</sup>? B, page 358. Diagram of the distribution of electricity on a sphere, Note N, page 365.

 DIELECTRIC. See INDUCTION. Defined, 473. Substitution of a solid dielectric for air, 474. Plane and cylindrical dielectrics, 478, 479, 482. Poisson's conditions, 481. Kelvin's theorem, 483. Various problems and results, 484, 485, 486. Extension of Poisson's theorem for dielectrics, 492.