

## INDEX

- Absolute Temperature**, 322; relation to pressure and volume of gas, 322; units, 388  
**Absorption**, selective, 270; and radiation, 410  
**Accelerated motion**, laws of, 387  
**Acceleration**, 383; and mass, 385; of gravity (g), 385, 390  
**Accommodation of eye**, 262  
**Action and reaction**, 24, 382  
**Aeroplane**, 313; stability of, 314  
**After-image**, 287  
**Air**, weight of, 77; cushion, 83; expansion of, 111; sound travels in, 222; coefficient of expansion of, 320; increase of pressure by heating, 321; thermometer, 323  
**Alpha**, rays, 416  
**Alternating current**, 193  
**Ammeter**, 169, 203  
**Ampere**, unit of current strength, 203  
**Amplitude**, of wave, 227  
**Angle**, visual, 263; of incidence, 267, 360; of reflection, 267; of refraction, 360; critical, 363; lens, 259, 356, 357, 359, 368  
**Anode**, in electrolysis, 202  
**Antenna**, 346  
**Aperture**, of mirror, 369  
**Apparent size**, 251, 263  
**Archimedes'**, principle, 87  
**Aristotle**, 77, 112  
**Arm of force**, 45  
**Armature**, 163; motor, 177; dynamo, 192  
**Atmospheric pressure**, 78, 85; calculation of, 86  
**Atomic structure**, 414  
**Atoms**, 405  
**Axis**, of a beam of light, 254; of a lens, 258; principal of mirror, 369  
**Ball bearings**, 308  
**Barometer**, 85; normal pressure, 119  
**Balloons**, 80  
**Becquerel**, rays, 415  
**Beta rays**, 416  
**Beats**, of tones, 243  
**Bell**, electric, 157, 163, 166, 348  
**Biplanes**, 315  
**Boats**, 89  
**Boiler**, flash, 325  
**Boiling**, 121; point, 121, 129; point and pressure, 129  
**Boyle**, Robert, law of, 84, 231, 323, 405  
**Brake**, test, 104; horsepower, 105; of electric motor, 211  
**British Thermal Unit**, 124; equivalent in foot pounds, 151; in watt-seconds, 213; in kilowatt-hours, 214  
**Burners**, relative efficiency, 141  
**Calorie**, gram, 124; equivalent in gram-centimeters, 151; relation to watt-second, 213  
**Camera**, pin-hole, 253; photographic, 356  
**Candle-power**, 269  
**Capacity**, of condenser, 340; effect on oscillation, 343  
**Capillarity**, 401  
**Cathode**, in electrolysis, 202; rays, 412  
**Cell**, simple voltaic, 158; gravity, 160; Leclanche, 160; dry, 161; in series, 172; in parallel, 209  
**Center of gravity**, 18, 49, 91, 112  
**Centigrade thermometer**, 119; relation to absolute, 322  
**Centrifugal force**, 392  
**Charges**, electrostatic, 335; opposite arc equal, 337; induced, 338;