

- 53. Microscope ;—principle of the compound microscope.
- 54. Principle of the astronomical telescope ;—terrestrial telescopes.
- 55. Myopy ;—presbyopy ;—glasses used to correct these defects.

XI.

- 56. Magnetism ;—natural magnets ;—artificial magnets.
- 57. Direction of the magnetic needle ;—cause ;—description of the mariner's compass and its use.
- 58. Electricity ;—principal means employed for producing it ;—bodies best adapted for producing it.
- 59. Influence of one electrified body upon another ; good and bad conductors ;—principal bodies which possess the property of conducting electricity.

XII.

- 60. Attraction of points ;—lightning-rods and their proper construction.
- 61. Electrical machine and its proper construction.
- 62. Disguised electricity ;—principle of the Leyden Jar, and the effects it may be made to produce.
- 63. Cause of lightning and of the noise produced by thunder ;—returning stroke.

XIII.

- 64. Voltaic Pile ;—Grove and Bunsen's batteries.
- 65. Physical, chemical, calorific and luminous effects of electric currents.
- 66. Electro-plating in gold, silver and copper.
- 67. Electro-magnets and their principle.
- 68. Electric telegraph ;—description of Morse's Telegraph.

XIV.

- 69. Fogs ;—clouds ; names of different formations of clouds and descriptions.
 - 70. Dew ;—rime-frost ;—snow ;—hoar-frost ;—sleet ;—hail.
 - 71. Hygrometers ;—hair hygrometers ;—Daniel's hygrometer.
 - 72. Cause of the rainbow.
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