

Telegraph:

- semaphore, 68.
- loadstone, 88.
- Franklin's electric firing, 88.
- electrically dropped balls, 88.
- electric transmission of musical tones, 91.
 - of signals, 94
- Morse register, 95.
- first line, 97.
- description, 98.
- reading by various senses, 100.
- Bain, chemical recorder, 101.
- Cooke needle, 108.
- Wheatstone needle, 108.
- House printing, 108, 110.
- Hughes printing, 108, 112.
- automatic systems, 109, 112.
- multiple transmission, 114.
- musical transmission, 120.
- musical receivers, 125.
- Way duplex, 129.
- from moving railway trains, 131.
- repeater, 150.
- short-line dials, 159.
- printing, 163.
- wireless, Ch. XXI, 176.
- Telegraphic messages, receiving, 103.
- Telephone, Chs. XV, XVI, 134, 145.
 - author's first experiment, 91.
 - experiments, 123.
 - caveat, 135.
 - speech receivers, 139.
 - boys' telephone, 141.
 - first specification of, on record, 143.
 - how telephone talks, 145.
 - simple construction, 146.
 - two methods of transmission: magneto and varied resistance, 142, 149,