Ether, impressed by atomic motion, 56. inducing electric action, 56.

Farad, unit of capacity, 118.
Faraday, Michael, 14.
Farmer, Moses G., double transmission, 114.
Field, Cyrus W., lays first Atlantic cable, 156.
Field of a magnet, 31.
Fitzgerald, Niagara Falls chemist, 210.
Franklin catches the lightning, 8.
identity of lightning and electricity, 10.
kite experiment, 11.
electric firing-telegraph, 88.

Frode, history of Iceland, 21.

Gadenhalen uses magnetic needle 868 A.D., 21. Galileo's seed-thought, 89. Galvani, Luigi, and galvanism, 12. Galvanic batteries, 62. author's experience, 65.

Galvanometer, 75, 93.

Gilbert, Dr., frictional electricity, 7. Gintl, double transmission, 114.

Gray, Elisha, constructs voltaic pile, 65.
electrically transmits music, 91.
experiments on transmission of music, articulate speech, and multiple messages,

files telephone caveat, 135.
musical experiments, 136.
speech receivers, 139.
boys' telephone, 141.
first telephone specification on record, 143.
dial-telegraph, 161.
automatic-printing telegraph, 163.

telautograph, 165. electric musical receiver, 175.

Gray, Stephen, electrician, 8.