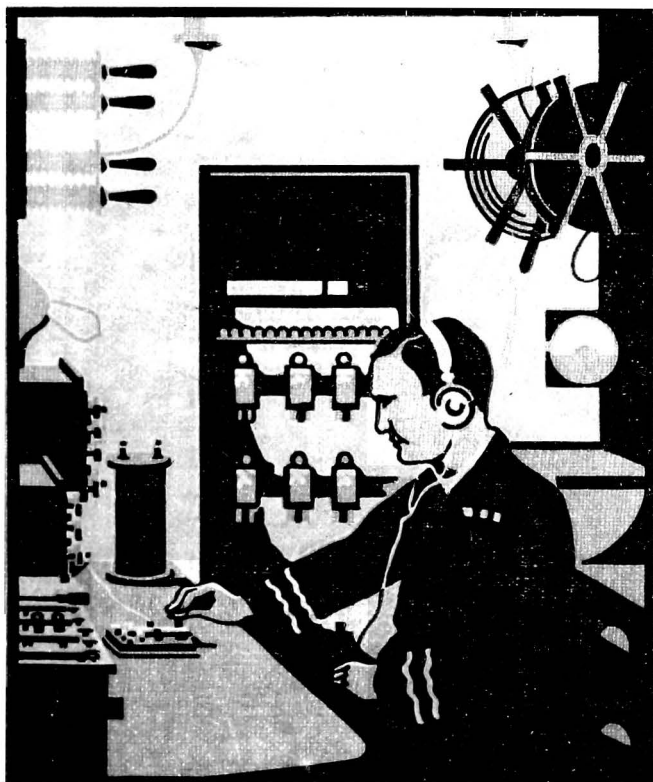
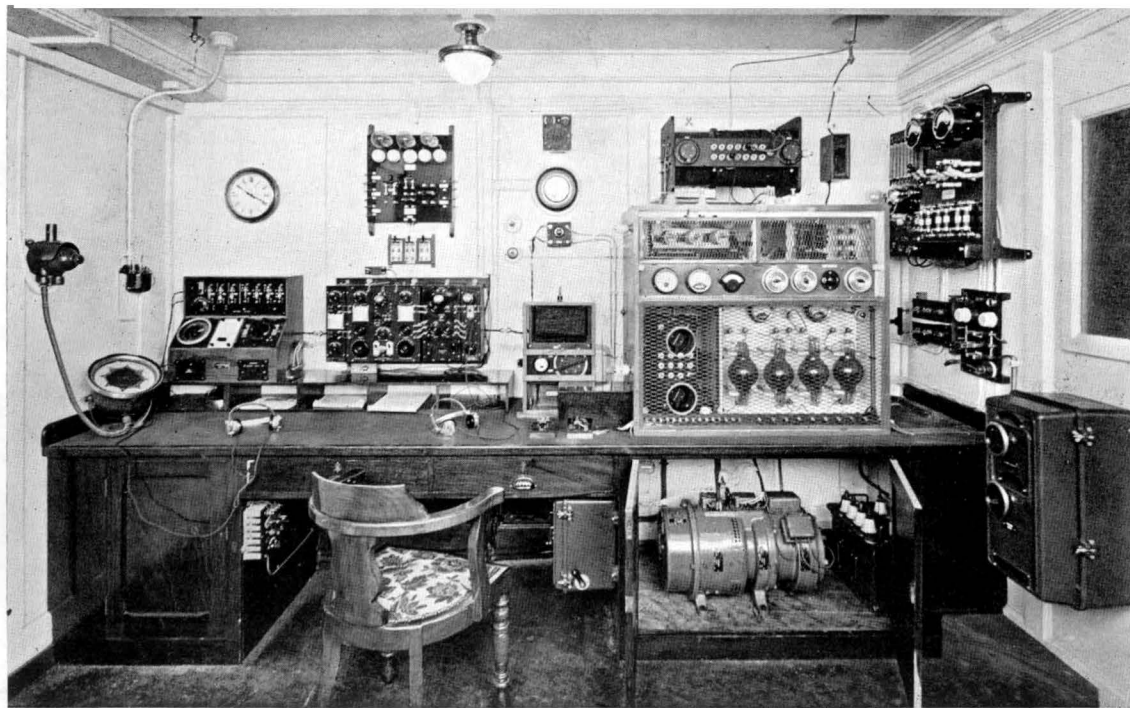


ELECTRICITY AS · A · WIZARD



CHARLES · R · GIBSON



By permission of Messrs. Marconi's Wireless Telegraph Co., Ltd.

WIRELESS ON A LINER

The apparatus from left to right is: Direction Finder, Receiver, Quenched Spark Transmitter, Transmitter for a wave range of 600-850 metres and 2000-2750 metres. This apparatus is in accordance with the Washington Conference Resolution.

ELECTRICITY AS A WIZARD

Explaining how it works and
what we know of it

BY

CHARLES R. GIBSON, LL.D., F.R.S.E.

Author of "How we Harness Electricity" "Wireless"
"Telephones and Gramophones" &c.

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PREFACE

It is improbable that this preface will be read by the young people for whom the book has been written, but it explains the occasion of writing the book, and also tells what the book is about.

It is the author's forty-third book, and was written in connexion with the Christmas Lectures which he delivered to young people in Glasgow, at the request and under the auspices of the Royal Philosophical Society of Glasgow.

The Society desired to follow the lead, in a humble way, of the world-famous Christmas Lectures which have been delivered in the Royal Institution of London since the days of Faraday, and the author has followed the practice of some of the distinguished lecturers in writing the subject in book form, and then speaking from notes taken from the book. Of course, it was impossible to give all the details of the book in the lectures, but both cover the same ground.

The title—*Electricity as a Wizard*—was suggested to the author by his brother-in-law, Rev. W. J. Finlay Maguire, of Belfast, and it was

intended to indicate that the lectures were not ordinary school lectures.

Thinking it would be helpful to realize what the children think about electricity, the author asked the headmasters of four large schools to set an essay on the subject of electricity, and to give no time for preparation. The results showed the author where the difficulties lie; the essays are dealt with in two of the following chapters.

The lecturer dealt with electricity as a worker of wonders, and the idea of the wizard permeated the whole subject. As will be seen from the book, the lectures covered a very wide field, and dealt with Discovery, Invention, and Theory. It was explained that every existing thing was composed of electricity, and the inner meaning of things was explained in simple language; among the many marvels it was suggested that the most "wizardous" thing was making an iron plate speak in the telephone receiver.

The whole subject is kept well within the easy grasp of all boys and girls of school age.

Contents

CHAP.	Page
I. A WORKER OF WONDERS - - - - -	1
II. HOW THE WIZARD WAS DISCOVERED - - - - -	9
III. A GREAT DISCOVERY - - - - -	26
IV. AN INVISIBLE MESSENGER - - - - -	37
V. MESSAGES ACROSS THE SEA - - - - -	48
VI. SPEAKING THROUGH SPACE - - - - -	61
VII. THE VALVE IN WIRELESS - - - - -	74
VIII. MAKING A PIECE OF IRON SPEAK - - - - -	87
IX. MAKING THE WHEELS GO ROUND - - - - -	101
X. ALADDIN - - - - -	112
XI. THE WIZARD IN WARFARE - - - - -	120
XII. FLOODING A ROOM WITH LIGHT - - - - -	125
XIII. TELEGRAPHING PHOTOGRAPHS - - - - -	134
XIV. OTHER WONDERS OF THE WIZARD - - - - -	139
XV. WHAT BOYS AND GIRLS THINK ABOUT ELECTRICITY	144
XVI. MORE IDEAS AND THE ORTHODOX - - - - -	156
XVII. HOW OUR IDEAS CAME ABOUT - - - - -	163
XVIII. WAVES IN THE ÆTHER - - - - -	176
XIX. MORE ABOUT WAVES - - - - -	190
XX. THE CONCLUSION OF THE WHOLE MATTER - - - - -	204
APPENDIX—	
LIST OF EXPERIMENTS SHOWN IN LECTURES - - - - -	207
INDEX - - - - -	202

List of Plates

	Facing Page
WIRELESS ON A LINER - - - - <i>Frontispiece</i>	
PRODUCING HYDROGEN AND OXYGEN COMMERCIALY - -	17
AN IGRANIC LIFTING MAGNET - - - - -	32
CREED RECEIVER; CREED PRINTER - - - - -	48
BRIDGEWATER BEAM RECEIVING WIRELESS STATION - -	81
INTERIOR OF THE AUTOMATIC TELEPHONE EXCHANGE AT YORK	96
FARADAY'S ELECTROMAGNET - - - - -	101
DIRECT-CURRENT GENERATOR RATED AT 550 KW. - -	108

INDEX

- A B C, Morse, 40.
A B C, needle-telegraph, 40.
A B C, siphon recorder, 56.
Acidulated water, 20, 22.
Aerial, 70, 71, 72.
Affinity, chemical, 172.
Air and ether, 188, 189.
Air and electricity, 147, 149.
Aladdin, 6, 112.
Alternating current, 105.
Aluminium window in tube, 167.
Amber, 10, 163.
Amber's soul, 10.
America, 3, 48.
American warship, 49.
Amusing incident with dynamo, 104.
Amusing wireless incidents, 62, 91, 185.
Analogy of billions, 183.
Animal electricity, 20.
Arabian Nights' Tales, 112.
Arabi Pasha, 121.
Arago, 33.
Arc, electric, 127, 128.
Arc lamp, 128, 129, 130.
Aristotelians, 11.
Aristotle, 10, 11.
Artificial diamonds, 118, 119.
Atlantic, 48, 51, 72.
Atlantic cable, 48.
Atmosphere around charged body, 164.
Atom, hydrogen, 22.
Atom, oxygen, 22.
Atomic nature of electricity, 168.
Atoms, cubical, 175.
Atoms, elliptical, 175.
Attractive power, 12.
Audience of mutes, 26.
"Australian sausage machine", 46.
Autobiography of an electron, 171.
Automatic railway signalling, 141.
Automatic telephone exchange, 95, 96.
Automatic transmitter, 45.
Ayrton's prophecy, 61, 62.
"Baby", 46.
Bad spelling, 145.
Battery, electric, 21.
Battery of Leyden jars, 17.
Battery, primary, 114.
Battery, secondary, 115.
Beam of light carrying speech, 82.
Beats, 69.
Before Christ, 150.
Bell, electric, 96, 110.
Bell, Graham, 93, 94.
Ben Nevis, 26.
Black board, 195, 196.
Blanket of air, 189.
Block system on railway, 140.
Blythswood, Lord, 63.
Boatman and siphon, 57.
Bonding of rails, 109.
Boy combing hair, 154.
Boy making water waves, 65, 181.
Boys boating at Cambridge, 84.
Boy's idea of battery, 150, 162.
Boy's idea of dynamo, 154.
Boy's idea of electricity, 147, 148, 157, 158.
Brake, electric, 36, 110.
Brazilian Emperor, 94.
Breaking-up water, 22, 23.
Britain and America, 48, 72.
Broadcasting, 186.
Broken cable, 49.
Brush of dynamo, 107.
Bubbles exploded, 23, 24.
Cable, Atlantic, 48.
Cable (1865), 52.
Caliban, 4.

- Cambridge boating, 84.
 Cambridge lecture, 83, 84.
 Canada, 93.
 Candles snuffed, 125.
 Car, tramway, 5, 36, 101, 109, 158.
 Carlisle and Nicholson, 22, 26.
 Carrier wave in wireless, 192.
 Cathode rays, 168.
 Cell, electric, 22.
 Cell, selenium, 82, 98, 135.
 Chain of platinum and silver, 130, 131.
 Charge of electricity, 173.
 Charged, negatively, 173.
 Charged, positively, 173.
 Chelmsford incident, 62.
 Chemical action, 22.
 Chemical affinity, 172.
 Chemical union, 172.
 Chemical works, 26.
 Chinaman and car, 101.
 Clergyman and matches, 126.
 Clerk Maxwell, 58, 66.
 Clerk Maxwell's song, 59, 60.
 Clock, electric, 139.
 C.M., 37.
 Coal-gas, 126.
 Coherer, 69.
 Colour sensation, 195, 196.
 Combing hair, 154.
 Commutator, 106.
 Compass needle, 27, 33.
 Connexion between electricity and magnetism, 28, 29.
 Continuous electric current, 106.
 Copenhagen, 28.
 Copying medals, 115.
 Cowles brothers, 116.
 Cranes, 34.
 Crookes, Sir Wm., 166.
 Crusie, 125.
 Cubical atom, 175.
 Current, alternating, 105.
 Current, continuous, 106.
 Current, direct, 106.
 Current, discovery of, 20, 21.
 Cylinder electric machine, 14.
 Davy, Sir Humphry, 24, 32, 33, 127, 130.
 Deaf and dumb audience, 26.
 Decomposition of water, 22, 23.
 Deflection, magnetic, 169.
 Diamonds, making, 118, 119.
 Direct current, 106.
 Discharge magnetizes needle, 28, 30.
 Discovery by Oersted, 27, 28, 29.
 Discovery of electron, 166, 168.
 Discovery of potassium, 24.
 Discovery of the Wizard, 9.
 Dutch professor, 16.
 Dynamo, 102, 105, 106, 146.
 Early telegraph, 37, 38.
 Early wireless lecture incident, 84.
 Edison, 75, 132.
 "Edison effect", 75.
 Edison's greatest invention, 132.
 Edison's patents, 132.
 Electric arc, 127, 128.
 Electric attraction, 12.
 Electric battery, 21.
 Electric brake, 110.
 Electric charge, 173.
 Electric clocks, 139.
 Electric current, 20, 101, 102.
 Electric furnace, 117, 118.
 Electric light, 3, 125.
 Electric machines, 14, 28, 38.
 Electric motor, 107, 108.
 Electric shock, 15, 17.
 Electric sparks, 13, 15, 16, 65, 66, 149, 190.
 Electric tools, 111.
 Electricity and air, 147, 149.
 Electricity and magnetism, 28, 29.
 Electricity and sparks, 149.
 Electricity and water, 147, 148, 149.
 Electricity as a messenger, 5, 37.
 Electricity, boy's idea of, 147, 148, 157, 158.
 Electricity, discovery of, 9.
 Electricity, resinous, 164.
 Electricity, vitreous, 164.
 Electrified hair, 154.
 Electrified stockings, 165.
 Electro-magnet, 36.
 Electro-magnet, a tug-of-war, 36.
 Electro-magnet and weight, 36.
 Electro-magnet induction, 80.
 Electro-magnet, inventor of, 33.
 Electron, discovery of, 168.
 Electron jumps, 190.
 Electron rings, 172, 174, 198, 199.
 Electrons, 166, 168, 172, 174, 198, 199.
 Electrons escape from flame, 170.
 Emperor of Brazil, 94.
 Essays, 144, 156.
 Exchange, telephone, 95.
 Explosion of bubbles, 23, 24.
 Faraday, Michael, 101, 102, 108.
 Fay, Du, 164, 165.
 Filaments of lamps, 78, 131, 132.

INDEX

c

- Filings and electric waves, 69.
 Fire-alarm, 5.
 First speaking telephone, 89, 94.
 Flame and electrons, 170.
 Fleming, Prof. J. A., 74.
 Flint and steel, 126.
 Forks, tuning, 85, 197.
 Franklin, Benjamin, 3, 9, 17, 28,
 48, 146, 150, 164, 166.
 Frog's legs, 19.
 Furnace, electric, 117, 118.
- Galileo, 11, 62, 63, 177.
 Galvani, Prof., 19.
 Galvanometer, marine, 53, 55.
 Galvanometer, mirror, 55.
 Gilbert, Dr. Wm., 12, 163.
 Girl and mummy, 160.
 Glass cylinder machine, 14.
 Glass electrified, 10, 164.
 Glass plate machine, 14.
 Goold, Joseph, 68.
 Government and telegraph, 41.
 Gramophone, 7.
 Gravity defied, 35.
 Gray's Inn Road incident, 81.
 Gray, Stephen, 164.
Great Eastern, 52.
 Guericke, Otto von, 13.
- Helen's Babies*, 101.
 Hertz detector, 66, 67, 68.
 Hertz, Prof., 66, 169.
 Hertz transmitter, 67.
History of Electricity, Priestley's, 2.
 Hobby, 205.
 Hospital, 5.
 Howlers, 146, 152, 153.
 Humours, 163.
 Hydrogen atom, 22.
 Hydrogen gas, 22.
- Incandescent electric lamp, 131.
 Indian and telephone, 95.
 Indian Mutiny, 51.
 Individual motors, 111.
 Induction, electro-magnet, 80.
 Influence machine, 16.
 Infra-red rays, 188, 194, 202.
 Ink electrified, 57.
 Insulated ribbon of kite, 18.
 Interference of electric waves, 68.
 Interference of sound waves, 68.
 Invisible messenger, 37.
 Iron floating in air, 35.
 Iron made to speak, 7, 87.
 Ironworks, 34.
- Islands of overhead tramway wires,
 109.
 Isle of Wight, 81.
- Jar, Leyden, 16, 64.
 Jet, 10.
 Jupiter's moons, 179.
- Kelvin atom, 170.
 Kelvin, Lord, 7, 52, 57, 58, 63, 94,
 165.
- Kinlochleven, 26.
 Kitchen poker, 34.
 Kite, 9, 17, 18, 146, 150.
 Knives magnetized by lightning, 28.
 Korn, Prof., 138.
 "Kwaker", 41.
- Lenard, Prof., 167.
 Letter concerning Atlantic cable, 53.
 Leyden jar, 16, 64.
 Light, electric, 3, 125.
 Light, invisible, 193, 194.
 Light, visible, 181, 182.
 Lightning, 17, 18, 27, 151, 152.
 Lightning and knives, 28.
 Lightning conductors, 18.
 Light waves, 181.
 Lodestone, 26, 27.
 Lodge, Sir Oliver, 63.
 Long waves, 65, 182.
 Lunar Society, 2.
- Magnet, natural, 26, 27.
 Magnetic deflection, 169.
 Magnetic solenoid, 31.
 Making an iron plate speak, 87.
 Making the wheels go round, 101.
 Marconi, 70, 71, 72.
 Marconi's greatest invention, 71.
 Marine galvanometer, 53, 55.
 Measuring the velocity of light, 179.
 Metallic filings and waves, 69.
 Mode of motion, 166.
 Morrison, Charles, 38.
 Morse code, 40.
 Morse, Samuel B., 42.
 Morse sounder, 42, 43.
 Morse writer, 43.
 Motor, electric, 107, 108.
 Mummy, 160.
 Murderer and telegraph, 41.
 "Murray's Coffee Mill", 46.
- Nails and lightning, 28.
 Natural magnet, 26, 27.
 Needle, compass, 27, 33.
 Needle magnetized by current, 33.

- Needle magnetized by discharge, 28, 30.
 Needle telegraph, 39, 40, 42.
 Needles, confusion about, 120.
 Negative electricity, 165.
 Neon lamp, 132.
 Nernst lamp, 135.
Niagara warship, 53.
 Nicholson and Carlisle, 22, 26.
 Nickel-plated, 112, 114.
 North and south, 27.
- Oersted's great discovery, 27, 28, 29.
 Old lady and electricity, 154.
 Old woman and telegraphing boots, 134.
 One-fluid theory, 164.
 Optophone, 8, 97, 98, 99, 100.
 Orthodox, 156.
 Oscillations, 190.
 Osram lamp, 132.
 Oxygen atom, 22.
 Oxygen gas, 22.
- Paddington Station, 41.
 Pea analogy, 183.
 Pen telegraph, 47.
Philosophical Magazine (1735), 27.
 Phosphorescent screen, 5, 6.
 Photographs telegraphed, 8, 134, 135, 136, 137.
 Physician to Queen Elizabeth, 10, 163.
 Pig-iron, 34.
 Pile, Volta's, 20, 26.
 Pixii's dynamo, 103.
 Platinum, 22, 131.
 Platinum and silver chain, 130, 131.
 Poker magnetized, 34.
 Policeman and potassium, 25.
 Positive electricity, 165, 172.
 Positive sphere atom, 171.
 Potassium, discovery of, 24.
 Preece, Sir Wm., 82.
 Priestley, Rev. Dr. Joseph, 2, 19, 133.
 Priestley's *History of Electricity*, 2.
 Primary batteries, 114.
 Prime conductor, 14.
 Production of waves, 65, 171.
 Protons, 154, 174, 198.
- Quadruplex telegraphy, 47.
 Quaker murderer, 41.
 Quanta, 200.
 Quantum theory, 200.
 Queen Elizabeth's physician, 10, 163.
- Radiant matter, 166.
 Radium, 203.
 Railway block system, 140.
 Ramp rail, 141.
 Rays, cathode, 168.
 Receivers (wireless), 73.
 Rectified current, 76, 191, 192.
 Red board, 195, 196.
 Reis, Philip, 88.
 Relativity, theory of, 201.
 Renfrew, 38.
 Rescue of ship, 43, 190.
 Resin, 10.
 Resinous electricity, 164.
 Ridiculous behaviour of a metal, 24.
 Rings of electrons, 172, 174, 198, 199.
 Robots, 161.
 Roemer, 179.
 Royal Institution, 32, 101, 127.
 Russian professor killed, 19.
- Scale of waves, 181, 186.
 Schoolgirls and colours, 195.
 Schuster, Prof., 167.
 Sciences, variety of, 205.
Scots Magazine (1753), 37.
 Secondary batteries, 115.
 Selenium, 82, 98, 135.
 Self-exciting dynamo, 102.
 Semaphore system, 41.
 Sensation, colour, 195, 196.
 Sewing-needle magnetized, 28, 30.
 Shakespeare, 4, 204.
 Shock, electric, 15, 17.
 Short waves, 66.
 Silk and glass, 12.
 Silver-plating, 112, 114.
 Single-needle telegraph, 39, 40, 42.
 Single-stroke bell, 110.
 Siphon and boatman, 57.
 Siphon recorder, 56.
 Slough, 41.
 Sodium flame, 195.
 Solenoid, 30, 31, 35.
 Song of Electric Telegraph Co., 59, 60.
 S.O.S., 43, 190.
 Soul of amber, 10.
 "Soul of Nature", 29.
 Spark, electric, 13, 15, 16, 65, 66.
 Speaking along a beam of light, 82.
 Speaking telephone, the first, 89, 94.
 Speaking through space, 61, 76.
 Stockings electrified, 165.
 Surgeon, Wm., 33.
 Submarines, 122, 123.
 Substation, 109.

INDEX

e

- Sulphur, 10, 12.
 Sulphur machine, 13.
 Swallowed halfpenny, 5.
 Symmer, Robert, 165.
- Tank of peas, 183.
 Tantalum filament, 132.
 Telegraph, 5, 37, 39, 40, 42.
 Telegraphing photographs, 8, 134,
 135, 136, 137.
 Telegraphing with pen, 47.
 Telegraphone, 6, 97.
 Tel-el-Kebir, 120.
 Telephone and beam of light, 82.
 Telephone and Morse signals, 74,
 121.
 Telephone, description of, 3, 82, 89,
 93.
 Telephone exchange, 95.
 Telephony, wireless, 61, 76, 82.
 Thermionic valve, 73, 78.
 Thermo-electric couple, 187.
 Thomson, Prof. Wm. (Lord Kelvin),
 7, 52, 53, 57, 58, 63, 94.
 Thomson, Sir J. J., 166.
 Three Tailors of Tooley Street, 9.
 Thunder clouds, 18.
 Tinder-box, 126.
 Toddy in *Helen's Babies*, 101.
 Tools, electric, 111.
 Tradesman of Wakefield, 28.
 Tramp and boots, 134.
 Tramway car, 5, 36, 101, 109, 158.
 Transformers, 109.
 Transmitter, automatic, 45.
 Trembler-bell, 96, 110.
 Trolley pole, 158.
 Tug-of-war with magnet, 36.
 Tungsten filament, 132.
 Tuning, analogy with forks, 85, 197.
 Tuning-forks, 85, 197.
 Tuning in wireless, 85.
 Two-fluid theory of electricity, 164,
 165.
 Two thousand years ago, 10.
 Typewriting telegraph, 46.
- Ultra-violet light, 187.
 Union, chemical, 172.
- Vacuum tube, 166.
 Valve as transmitter, 193.
 Valve, wireless, 74, 76.
 Velocity of light, 177, 178, 179.
 Velocity of waves, 176.
 Ventriloquist, 7.
 Vibrating bars, 197.
 Visible light, 181, 182.
 Vitreous electricity, 164.
 Volta's pile, 20, 21, 26.
 Volts, 20.
- Wakefield tradesman, 28.
 Warfare, 120.
 War Office, 51.
 Water and electricity, 147, 148, 149.
 Water, decomposition of, 22.
 Water waves, 65, 176, 181.
 Watt, James, 3.
 Wave, carrier, 191, 192.
 Wave interference, 68.
 Waves in æther, 176, 181, 186.
 Waves, long, 65, 182.
 Waves, rate of travel, 176.
 Waves rectified, 192.
 Waves, short, 66.
 White light, 194.
 Wight, Isle of, 81.
 Wireless receivers, 73.
 Wireless telegraphy, 6, 69.
 Wireless telephony, 4, 191, 192.
 Wireless waves, 180.
 Wizard, meaning of, 1.
 "Wizardous", most, 7.
 Wolseley, Sir Garnet, 121.
- X-ray quanta, 200.
 X-ray tube, 202.
 X-ray waves, 188.
 X-rays and broken arm, 6.
 X-rays and child, 5.
 X-rays from radium, 188, 203.
- Young lady and birds in wireless,
 185.
- Zinc, 21, 22.
 Zinc mines, 116.