

INDEX

ILLUSTRATIONS.

A

Acoustics, experiment in..... 199
 Aerial ascensions app..... 167
 Aerodynamics, experiments in..... 180
 Air compressor, hydraulic..... 370
 Altar, household..... 371
 Alternator, 250 kilowatt..... 246
 Alternator, Tesla's..... 195
 Aluminum, acoustic prop..... 312
 Ammonia motor..... 50
 Andiron teakettle..... 389
 App. meas. veloc. project..... 407
 Ascensions, aerial, app..... 167
 Automaton, curious..... 179
 Aviator, Trouve's..... 105

B

Balloon, Riddle's..... 291
 Ballot box, improved..... 402
 Ball, gyrating..... 292
 Barometer, lecture..... 184
 Bed spring..... 292
 Bell, A. G..... 199
 Belts, rubber..... 243
 Bicycle, Lovell..... 228
 Bicycle railway..... 247
 Billiard balls, tricks with..... 279
 Bit, bridle..... 243
 Blanket fastener..... 338
 Blasters, tool for..... 34
 Blow pipe, electric..... 184
 Boat, house, Lorillard..... 162
 Boiler feed, automatic..... 162
 Bolt header, Betts'..... 387
 Book, account..... 260
 Book, ventilated..... 190
 Bow for violins..... 57
 Boring machine..... 34
 Bremen, ferry boat..... 974
 Brick making machine..... 351
 Bridle, paint brush..... 322
 Bridge, bamboo, India..... 137
 Bridge over canyons..... 226
 Burner, crude oil..... 226

C

Cabinet, kitchen..... 115, 164
 Cable road, San Salvatore..... 259
 Camera, hand..... 259
 Canal boats, electric towing..... 52
 Canyon of the Colorado..... 392
 Capillarity, experiment in..... 226
 Car, ammonia motor..... 50
 Car coupling, Trine's..... 275
 Car door..... 275
 Car door, Gray's..... 51
 Car, dumping..... 57
 Carriage, electric..... 18
 Carriage, gun, Elswick..... 310
 Carriage, steam, improved..... 194
 Cart, dump, improved..... 34
 Cash carrier..... 243
 Catch, safety, for guns..... 40
 Cannon, house boat..... 7
 Chaos to man..... 399
 Chicken brooder, Barney's..... 359
 Cigar holder, photographic..... 359
 Cigar measure..... 211
 Clay model for door..... 23
 Clock, electric chime..... 327
 Chime, electric..... 327
 Coal mining machine..... 162
 Coal typie, Murphey's..... 34
 Coins, trick with..... 279
 Colorado, canyon of the..... 392
 Columbus, first voyage of..... 22
 Condenser, siphon..... 342
 Cotton mill engine..... 173
 Coupling, car, Trine's..... 275
 Coupling, hose, Lentz's..... 402
 Crane, steam, locomotive..... 336
 Cruiser Edgar, engines of..... 279
 Cruiser Raleigh..... 258
 Cultivator, rotary..... 99
 Curling, indoor..... 131

D

Dedication, World's Fair..... 200
 Distributor of liquids..... 339
 Door, arch, model for..... 23
 Door, car, Gray's..... 275
 Door, car, Gray's..... 51
 Drier, wool..... 210
 Dynamo machines..... 38
 Dynamo, rotary current..... 102

E

Earphone..... 178
 Earthquake in Japan, recent..... 146
 Edgar, cruiser, engines of..... 279
 Edison, Phos. A..... 199
 Electric blow pipe..... 184
 Electric carriage..... 18
 Electric chime..... 327
 Electric governor..... 131
 Electric girl..... 262
 Electric insulator..... 370
 Electric light for lantern..... 183
 Electric lighting pull..... 265
 Electric station, Laufen..... 102
 Electricians, distinguished..... 199
 Elevators, safety device..... 51
 Emanations, destruction of..... 148
 Engine, gas, Charter..... 274
 Engine, gas, 60 h. p..... 355
 Engine, rotary..... 194
 Engine, traction..... 354
 Engines of cruiser Edgar..... 279
 Engines, mill..... 178
 Engines of Monterey..... 255
 Epoch, glacial..... 406
 Exhibition, Columbian..... 114
 Explosion, locomotive..... 258
 Exposition, map of..... 200

F

Fair, World's..... 114

Fair, World's, progress of..... 23
 Famine in India..... 357
 Feed water heater..... 211
 Feed water heater, Olsen..... 187
 Fence machine..... 197
 Ferry boats, new..... 374
 Fire alarm, economical..... 155
 Fire escape, improved..... 211
 Flour action, Bescher's..... 164
 Fly cleaner, Carbis'..... 312
 Flying machine..... 67, 105
 Flywheel, bursting of..... 19
 Foothills, terracing in..... 163
 Franklin statue..... 55
 Furnace, new..... 197

G

Gas engine, charter..... 279
 Gas engine, 60 h. p..... 355
 Gas illuminating, exper..... 153
 Gas pipe, girder..... 311
 Gauge, shingling..... 370
 Gauge, wire, pocket..... 340
 Girl, electric..... 262
 Glacier, Mur..... 227
 Go-devil..... 34
 Governor, electric..... 131
 Governor, engine..... 389
 Grain scourer..... 179
 Grant monument..... 277
 Gun, Adamson..... 84
 Gun carriage, disappearing..... 911
 Gun cleaning device..... 242
 Gun factory, Washington..... 86, 287
 Gun, Gatling, for police..... 175

H

Hackensack Water Company..... 207
 Harvester, ensilage..... 99
 Hay stacker, Collins'..... 258
 Heater, feed water..... 211
 Hill terraces, California..... 163
 Horse blanket fastener..... 338
 Horse, hairless..... 38
 House boat, Lorillard..... 7
 Hunt, T., Sherry..... 162
 Hydrostatic paradox..... 230

I

Ice flow..... 194
 Inaudi, calculator..... 230
 Inductors of dynamos..... 83
 Ink bottle, Hall's..... 260
 Insulator, electric..... 370

J

Jigger, ore washing..... 82
 Jar, canning or preserving..... 404

K

Kite flying experiments..... 5
 Kite for life lines..... 307
 Kitchen cabinet..... 115, 164

L

Laboratories, Purdue Univ..... 308, 306
 Lake steamers, new..... 306
 Lamp flash, new..... 258
 Lamps, light house, U. S..... 367
 Lathes, screw cutting..... 34
 Ledger, Dupue's..... 240
 Life line carried by kite..... 307
 Light, electric, for lantern..... 183
 Lighthouse illumination..... 373
 Lime kilns, shell..... 215
 Liquids, raising, device for..... 230
 Lock, nut..... 18
 Locomotive, compound, new..... 111
 Locomotive, freight..... 259
 Locomotive, fast, old time..... 159
 Locomotive, freight..... 210
 Locomotives, train of..... 389
 Logging in Minnesota..... 279
 Lovring, Prof. Joseph..... 179
 Lubricator, improved..... 179

M

Machine, hemp or fiber breaking..... 407
 Machine, punching, shearing..... 406
 Magnetic storm, Feb. 13..... 323
 Magnetograph, Kew..... 323
 Mastodon..... 375
 Meigs, Gen. M. C..... 71
 Mantonomoh, monitor..... 85
 Miners, tool for..... 34
 Monitor Mantonomoh..... 85
 Monument, Columbus..... 342
 Monument, Grant..... 277
 Monterey, engines of..... 255
 Moon, trip to the..... 229
 Motor, ammonia..... 50
 Motor, Neef's..... 275
 Motor, water..... 4
 Motor, wind, Ewarts'..... 327

N

Navigation, new system..... 98
 Niagara Falls water power..... 149
 Nut lock..... 290

O

Oil fields, map of..... 127
 Oil ump, Worthington..... 136
 Oil refinery, Cleveland..... 127
 Ore crusher..... 147
 Ore washer..... 342
 Ovens, annealing..... 343
 Overshoe attachment..... 36

Paradox, hydrostatic..... 230
 Park, Lower Bow..... 402
 Parrot, female, Gaboon..... 391
 Patent office, views in..... 380, 391
 Patents, Commissioner of..... 389
 Petroleum burner..... 226
 Photographs, magic..... 358
 Photography, distance..... 169
 Photo action, Bescher's..... 164
 Pike spearing..... 39
 Pipe, gas, girder..... 311
 Pipe line, Baku..... 35
 Planer, hand, new..... 115
 Flow, ice..... 194
 Plow, steam..... 231
 Plugger, dental..... 130
 Police gun..... 175
 Pot, measuring..... 99
 Poultry breeder..... 242
 Power, transm., electric..... 102
 Power, water, Niagara Falls..... 149
 Propeller blades, Welch's..... 162
 Pulley, clothes line..... 99
 Pump, high duty..... 214
 Pump, oil, Worthington..... 135
 Pump regulator..... 214
 Pumping outfit, Shipman..... 214
 Purdue University..... 306
 Pythons of Philippines..... 359

Q

Quilting machine..... 180

R

Race track, Stockton..... 263
 Rail, Glyn's..... 163
 Railroad signal..... 247
 Railway, bicycle..... 247
 Railway collision, Wisconsin..... 211
 Railway, elevated..... 211
 Railway, signal..... 232
 Rain making experiments..... 5
 Rain making in India..... 150
 Rain water, cut off..... 180
 Raleigh, cruiser..... 295
 Refrigerating machine, large..... 245
 Regulator, pump..... 211
 Resonance tube..... 354
 Rifle sight, Parker's..... 226
 Rods, hollow, rolling..... 150
 Rolling machine, Griffin's..... 150
 Rope traction..... 231

S

Saddle, harness..... 242
 Sea, bottom of chalk..... 406
 Sequoias..... 103
 Sewer, storm, Brooklyn..... 69
 Sewing machine motor..... 275
 Sewing machine, for cars..... 370
 Shingling gauge..... 370
 Ship, aerial, Middle's..... 191
 Shoe, ventilated..... 180
 Shooting pull, electric..... 265
 Shutter, camera, home-made..... 408
 Sickle grinder..... 149
 Sidelink, traveling..... 31
 Signal, railroad..... 163, 322
 Simonds, William Edgar..... 389
 Siphon condenser..... 54
 Siphon for domestic use..... 371
 Siphon, pump, Glyn's..... 199
 Smoke rings..... 199
 Soap bubble experiments..... 355
 Spout, cut-off..... 180
 Sprink, bed..... 292
 Square, carpenter's..... 240
 Steamers, lake, new..... 34
 Stereopticon, Beseler's..... 4
 Stevens' Institute..... 388
 Stocking, Preston's..... 230
 Stone works, steaton..... 37
 Storm, magnet. Feb. 13..... 323
 Sun, great spot on..... 118
 Sun spot, great..... 247
 Sun spots, Feb. 13..... 323
 Swab, gun, Garrison's..... 242
 Swimming equipment..... 366

T

Telegraph, Western Union..... 198
 Telegraphing without wires..... 36
 Telephone transmitter..... 20
 Temple, Mormon, Salt Lake City..... 83
 Temple, Odd Fellows'..... 118
 Terraces, hill, California..... 163
 Tesla, experiments of..... 199
 Tesla, Nikola..... 199
 Thomson, Elihu..... 248
 Tie, railroad..... 388
 Time ball service..... 392
 Time recorder, automatic..... 386
 Trunk protector..... 290
 Tin manufacture, St. Louis..... 34
 Tinkle, coal, Murphey's..... 34
 Titmouse, penduline..... 338
 Tool, intraching..... 243
 Tower, Columbian..... 9
 Towing by electricity..... 52
 Toys, novel..... 292
 Traction, rope..... 231
 Transmitter, telephone..... 20
 Trap pull, electric..... 265
 Trees, big, California..... 103
 Tricks, scientific..... 279
 Tube, speaking..... 178
 Tunnel, new method..... 53
 Turret for cars..... 387

U

University, Purdue..... 306

V

Valve, balanced, Kiley's..... 82
 Van Depeole, C. J..... 217
 Vessels, steam, vibrations..... 304
 Vesuvius, San Salvatore..... 35

W

Warship Raleigh..... 295
 Water Company, Hackensack..... 207
 Water feeder, automatic..... 162
 Water power, Niagara Falls..... 149
 Water register..... 185
 Water wheel, large..... 183
 Watson, sereno..... 231
 Weed puller..... 57
 Whiffletree hook..... 275
 Windmill, Ewarts'..... 4
 Wind motor, Ewarts'..... 34
 Wire gauge, pocket..... 340
 Wood bending machine..... 210
 Wool drier..... 210
 World, dawn of modern..... 406
 World's Fair..... 114
 World's Fair, progress of..... 23
 Wrench, improved..... 371
 Wrench, pipe..... 371
 Wrench pipe, Ryan's..... 67

Z

Zither, neumatic..... 40

MISCELLANY.

Figures preceded by a star (*) refer to illustrated articles.

A

Acid, chromic, for snake poison..... 34
 Acid, hydrocyanic, in blood..... 7
 Acid, hydrocyanic, poisoning..... 23
 Acid, nitrous, disinfectant..... 260
 Acoustic for scorpion sting..... 55
 Acoustics, experiment in..... 199
 Acoustics of halls..... 85
 Advertising, novel..... 34
 Aerial ascensions, app..... 167
 Aerodynamics, experiments in..... 180
 Aerolite, large, fair of..... 399
 Aerostation, military..... 264
 Agriculture, California..... 213
 Air, compressed, Chicago..... 226
 Air, compressed, transm. power, 164
 Air compressor, hydraulic..... 370
 Alaska, population of..... 117
 Ale, clarifying..... 345
 Algol-Alpha Persei..... 233
 Alloy for bearings..... 180
 Alloy for cementing, new..... 85
 Alloy, new..... 117
 Alloy tin, new..... 18, 42
 Alloys, allotropism in..... 115, 162
 Alloys, iron-aluminum..... 115, 162
 Altar, household..... 371
 Alternator, 250 kilowatt..... 246
 Alternator, Tesla's..... 195
 Aluminum, acoustic prop..... 312
 Aluminum, cheap..... 7
 Aluminum as a coin..... 229
 Aluminum in galvanizing..... 353
 Aluminum light..... 65
 Aluminum, manufacture of..... 118
 Aluminum, production of..... 118
 Aluminum soldering..... 262
 Aluminum statistics..... 290
 Ammonia motor..... 50, 304
 Ammonia, transport of..... 117
 Andiron, tea kettle..... 389
 Animals, longevity of..... 399
 Animals, speech in..... 129
 Animals and steam..... 88
 Antiseptics, new..... 337
 Ants, leaf-cutting..... 213
 Apples, "poisoned"..... 339
 Aquarium, proposed..... 372
 Arctic, dwellers in the..... 147
 Armor plates, test of..... 353
 Armor, submarine..... 217
 Arsenic in wall paper..... 214
 Ascensions, aerial, app..... 167
 Asphalt for iron..... 229
 Asphalt in rubber compounds..... 276
 Astronomy portrayed..... 137
 Atoms, clashing of..... 194
 Auditorium, keynote of..... 48
 Auser, patent case..... 43
 Aurora..... 24
 Automaton, curious..... 179
 Aviator, Trouve's..... 105

B

Bacillus of measles..... 340
 Bacteria, importance of..... 375
 Bacteria, proteo, residences from..... 17
 Balloon, Riddle's..... 291
 Ballooning, military..... 167, 264
 Balsam-bog..... 189
 Balls, foot, rubber..... 20
 Balls, gyrating..... 292
 Baltimore, condensers of..... 322
 Bananas, dried..... 352
 Banana trade..... 273
 Barometer, lecture..... 184
 Barrels, paper..... 282
 Baths, salt water..... 401
 Battery, storage, improved..... 24
 Batteries, storage..... 52
 Bear grass..... 213
 Bears, iceberg..... 354
 Bearings, alloy for..... 180
 Bearings, anti-friction..... 84
 Bearings, lubricated, friction..... 238
 Bed, cold, deadly..... 25
 Bed spring..... 292
 Beer, clarifying..... 345
 Bell, A. G..... 199
 Bells, sleigh..... 138
 Beetles, water, in gasometer..... 88
 Belts, preparation of..... 145
 Belts, rubber, improved..... 243
 Benzine explosion..... 388
 Benzine, explosive power..... 151
 Bicycle, Lovell..... 228
 Bicycle railway, fence..... 247
 Big tree, felling..... 168
 Bills, patent, before Congress..... 160
 Birds, life among..... 264

Birds, longevity of..... 20
 Bit, bridle..... 243
 Bit, dead..... 338
 Black knot law, N. Y..... 385
 Blackford, E., removal of..... 32
 Blanket fastener..... 338
 Blankets, rubber, cleaning..... 54
 Blasters, tool for..... 34
 Bleaching, wool..... 146
 Blood, travel of..... 166
 Blow pipe, electric..... 184
 Blow-pipe, new..... 130
 Boat, house, Lorillard..... 162
 Boat, submarine, new..... 137
 Boasting, American..... 280
 Boiler feed, automatic..... 162
 Boiler, how to fire..... 146
 Boiler waters, locomotive, treat-ment..... 25
 Boilers in out of way places..... 275
 Boilers, steam, caustic soda..... 176
 Bolt header, Betts'..... 387
 Book, account..... 260
 Books, privately illustrated..... 212
 Book, ventilated..... 190
 Boring machine vertical..... 34
 Botanical specimens, preserva-tion..... 88
 Bovines vs. equines..... 252
 Bow for violins..... 57
 Bowler, a giant..... 39
 Box, ballot, improved..... 402
 Brain workers, overeating..... 176
 Brains, squinting..... 376
 Brass, to color deep blue..... 160
 Breaker, fiber, Shely..... 403
 Breathing, abnormal..... 404
 Bremen, ferry boat..... 974
 Brick making machine..... 351
 Bricks, crushing resistance of..... 81
 Bridge, bamboo, India..... 137
 Bridge, great, for New York..... 201
 Bridge over Ganges..... 7
 Bridge, steel, over Mississippi..... 325
 Bright, paint, wash..... 338
 Brush industry, Florence..... 388
 Bullets, photographing..... 257, 812
 Bumblebee in New Zealand..... 82
 Burner, crude oil..... 226
 Burs, removal from wool..... 153
 Buoy, wreck-indicating..... 353
 Business maxims..... 116
 Butter, cocconut..... 24
 Buttons, celluloid, danger..... 208

C

Cabinet, kitchen..... 115, 164
 Cable, Hawaiian, survey..... 86
 Cable read of San Salvatore..... 259
 Cable, West Indian..... 85
 Cannon, house boat..... 7
 Camera, hand..... 259
 Camera, hand..... 259, 337
 Camphor, solvent..... 290, 337
 Canal boats, towing..... 52
 Canoe, dump, proposed..... 34
 Cane juice, purifying..... 345
 Canyons of the Colorado..... 392
 Cape flowers..... 384
 Cape Hatteras light..... 280
 Capillarity, experiment in..... 226
 Carbon bisulphide, purifying..... 65
 Car, ammonia motor..... 50
 Car coupling, Trine's..... 275
 Car couplings, resident on..... 88
 Car coupling, Trine's..... 275
 Car door, Gray's..... 51
 Car door, improved..... 275
 Car, dumping..... 57
 Car, mail, electric..... 80
 Car, storage battery..... 209
 Cars, American, in New England..... 214
 Cars, electric vs. cable..... 338
 Cars, sleeping..... 182
 Carriage, naval, knowledge..... 152
 Carriage, electric..... 18
 Carriage, gun, Elswick..... 310
 Carriage, steam, gasoline..... 339
 Carpet sprouting, cause..... 184
 Cart, dump, improved..... 34
 Cash carrier..... 243
 Castine gun boat..... 243
 Catch, safety, for guns..... 40
 Cats in Egypt..... 246
 Cattle, tubercular disease..... 192
 Caves, prehistoric..... 239
 Cave, wonderful..... 24
 Caviar..... 229
 Cells, glass, large..... 251
 Cells, storage..... 24
 Celluloid, dangers of..... 208
 Celluloid, experiments with..... 228
 Cement floors..... 228
 Cement for metal..... 83
 Cement testing..... 301
 Cemeteries, management..... 260
 Census of Canada, 1891..... 89
 Census, what it determines..... 150
 Channel, Duluth to Buffalo..... 400
 Chaos to man..... 399
 Charcoal briquettes..... 80
 Chemical Society, American..... 116
 Chemistry, science, advance..... 32
 Chicken brooder, Barney's..... 359
 Chignecto ship railway..... 25
 Children, poor, New York..... 281
 Chime, electric..... 327
 Chimneys, areas for..... 102
 Chlorophyll, composition..... 88
 Chronograph..... 407
 Cider, clarifying..... 345
 Cigar holder, photographic..... 359
 Cigar measure, Fernandez's..... 211
 City of Mexico, drainage..... 67
 City of Paris, ship..... 321
 Clay model for door..... 23
 Clock, flashing, electric..... 323
 Clock in India..... 342
 Cloth from Amer. ramie..... 345
 Clyments, new discovery of..... 36
 Coal dust, explosions of..... 48
 Coal exports, American..... 8
 Coal from artesian well..... 4
 Coal mines, remarkable..... 151
 Coal mining machine..... 162
 Coal port, Mobile, as..... 67
 Coal tippie, Murphey's..... 34
 Cocconut butter..... 24
 Coffee and strawberries..... 401

Coll, induction, improved..... 208
 Coins, new..... 148
 Cold, a remedy for..... 357
 Cold, remedy for..... 87
 Colima in eruption..... 57
 Colorado, canyon of the..... 392
 Columbus, Boston's tribute to..... 385
 Columbus, egg of..... 353
 Columbus, first voyage..... 22
 Columbus monument..... 342
 Comet, many-tailed..... 216
 Concrete and twisted iron..... 230
 Condenser, siphon..... 342
 Condensers of the Baltimore..... 322
 Conductors, all substances are..... 162
 Conductors, underground..... 241
 Conduits, electric, underground..... 145
 Contract, when complete..... 385
 Convulsions, remedy for..... 112
 Cork pavement..... 275
 Cotton mill engine..... 173
 Cotton oil soap..... 24
 Coupler, car, legislation..... 257
 Couplers, car, resident on..... 88
 Coupling, car, Trine's..... 275
 Coupling hose..... 402
 Crane, steam, locomotive..... 336
 Crane, Colorado..... 156
 Crocote in tuberculosis..... 261
 Crime, detect, by photog..... 356
 Cruiser Edgar, engines of..... 279
 Cruiser, Japanese, new..... 145
 Cruiser Raleigh..... 258
 Cultivator, rotary..... 99
 Curling, indoor..... 131
 Current, alternating, deadly..... 87
 Cutters, steam, U. S..... 340
 Cycles, digest of..... 40

D

Dam, masonry, the largest..... 336
 Deaf, educating..... 405
 Deaf, teaching to speak..... 21
 Deaf, watch, tick, of..... 322
 Debt, national of U. S..... 355
 Decorations, Senate Chamber..... 51
 Dedication, ceremonies, fair..... 200
 Dermatology..... 337
 Depot, ship, torpedo..... 164
 Destroyer, Ericsson's..... 213
 Developers, new..... 356
 Diamond dies for wires..... 25
 Diet, meat..... 24
 Dinornis..... 286
 Diphtheria spread by steam..... 242
 Disarm, Swamp..... 322
 Distillation, exhib., French..... 354
 Distillation of wood..... 358
 Distributor of liquids..... 339
 Doctor and good roads..... 393
 Door, arch, model for..... 23
 Door, car, Gray's..... 275
 Door, car, improved..... 275
 Doors, fireproof..... 245
 Drainage of city of Mexico..... 67
 Drawing, art of..... 106
 Drawing, microscopic..... 393
 Drier, wool..... 210
 Drug explosion..... 9
 Duluth, deep water to..... 54
 Dynamo machines..... 38
 Dynamo, rotary current..... 102

E

Earphone..... 178
 Earth, a shell..... 97
 Earthquake, California..... 328
 Earthquake in Japan, recent..... 146
 Earthquake, San Diego..... 213, 276
 Earthworms, work of..... 376
 Eating before sleeping..... 340
 Edgar, cruiser, engines..... 279
 Edison, Mr., honors for..... 388
 Edison, Phos. A..... 199
 Edison, Marmon B..... 374
 Education, liberal..... 117
 Egg of Columbus..... 353
 Electricians, distinguished..... 199
 Electric blowing pipe..... 184
 Electric insulator..... 370
 Electric light Association..... 145
 Electric light for lantern..... 183
 Electric light in medicine..... 344
 Electric light on Nile..... 146
 Electric lights for horses..... 70
 Electric lights for Home..... 213
 Electric lighting World's Fair..... 85
 Electric mail car..... 80
 Electric mining plant, large..... 290
 Electric motors burned..... 126
 Electric railway, scheme..... 161
 Electric ribbon machines..... 288
 Electric shock, death from..... 373
 Electric shooting pull..... 265
 Electric station at Laufen..... 102
 Electric station, highest..... 119
 Electric system, Pomona..... 274
 Electric tanning..... 241
 Electricity and seed growth..... 182
 Electricity, Henry's discoveries..... 193
 Electricity in paper..... 98
 Electricity, kite..... 337
 Electricity, legal..... 404
 Electricity, science, progress..... 140
 Electricity, stealing..... 273
 Electricity, what is it?..... 89, 152
 Electricity, wonders of..... 360
 Electrolytic experiment..... 259
 Electro plating with silver alloys..... 354
 Electrotechnics..... 119
 Elephant, feeding habits..... 266
 Elephants, language of..... 264
 Elephants, safety device..... 51
 Elevators, speed of..... 243
 Elm, rock..... 377
 Encyclopedia, a true..... 133
 Engine, gas, charter..... 274
 Engine, gas, 60 h. p..... 355
 Engine, marble..... 21
 Engine, rotary..... 194
 Engine, traction..... 354
 Engine, 1,500 h. p. rupture of..... 352

