(8224) R. A. S. asks: 1. What is the voltage of six cells of the Edison-Lalande battery, type "Q," as is used in the Otto gas engines, when connected in series? What is the amperage? A. A cell of this type is given 2-3 volt in the catalogue of the company. Six cells in series would have 4 volts. The safe working current is given as 2.5 amperes. The internal resistance of these cells is very low, 0.07 ohm. In order that the current may be 2.5 amperes the coil should have a resistance of 1.2 ohms, with the battery in series. 2. What difference would there be in the voltage and amperage if they were connected in multiple? A. When the battery is in multiple the voltage is 0.667 and the internal resistance is 0.01 ohm. With the same external resistance the current given would be about one-half an ampere. 3. I have a small toy motor which will run on two cells of the battery, if connected directly with the battery, but will not run on all six cells after it has passed through the resistance coil used for making the sparks for the engine. Can you tell me why this is? A. This is because the resistance of the coil is large as compared with that of the battery.

(8225) L. E. Dare asks: Is there an electric light which can be used successfully at any depth of water and about at what depth? A. Any incandescent electric light will burn under water at any depth if the wires and the lamp are protected from getting wet.

TO INVENTORS.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending June 11, 1901,

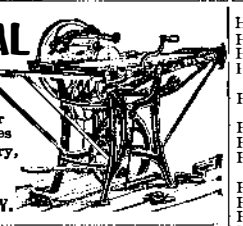
AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Advertisement displaying device, W. J. Jackson 676,235
Advertising device, movable, J. W. Fawkes, Jr. 676,126
Advertising displaying card, G. P. Duncan. 675,885
Agricultural implement, L. A. Aspinwall.. 676,248
Air brake, Wisner & Ely 676,019
Air brake mechanism, Mallinckrodt & Sauvage 676,398
Air compression apparatus, K. O. B. Textorius 676,401
Air compressor and explosive motor, combined, F. H. Biasse 676,349
Air compressor, hydraulic, L. E. Mitchell. 676,266
Air compressors, separator for hydraulic, W. O. Webber 676,016
Air separator, C. H. Lane 676,041
Animal trap, A. R. Hamilton 676,036
Automatic lubricator, P. J. Harleman.. 675,948
Automobile, I. Kitsee 676,263
Automobile vehicle, L. H. Dyer 676,223
Axle bending machine, Parry & Byers.... 676,007
Bag filling and weighing macine, A. & L. Smith 676,100
Bags or packets, machine for filling seed, C. T. Price 676,048
Bailing press, P. K. Dederick 675,937
Bank bill cutter, W. J. Arney 675,877
Barometer, mercurial, A. S. Davis 676,178
Barrel machine, C. A. Rafter 676,203
Bearing, axle, A. Riebe 675,975
Bed, folding, A. Haberman 676,384
Bicycle, L. S. Kallajian 676,003
Bicycle handle, Boehm & Waldron 675,927
Bicycle saddle support, A. R. Anthony et al 676,021
Bills, posters, etc., to walls, device for attaching, J. C. Patterson 676,150
Blasting device, Bryant & Brown 676,219
Blind holder, W. D. H. Nichols 676,337
Blower, rotary fan, H. B. Keiper 676,322
Boiler stay bolt, steam, J. H. Davenport... 675,935
Bolt, S. D. Latty 676,240
Bolt clamping device, N. W. McCourt 676,367
Books, detachable group of leaves for sectional, A. O. Kittredge 676,138
Boot or shoe, J. J. Pelucha 676,047
Bottle cork block, J. L. Wilson 676,018
Bottle corking device, J. P. Raiche 675,906
Bottle filling machine, W. P. Truden 676,402
Bottle, non-refillable, A. A. Freckman 675,942
Box cover brace and support, E. Kubias.... 676,325
Box trimming machine, J. E. Erickson 675,940
Brake, T. Edgington 675,939
Bricks, apparatus for the manufacture of, J. P. B. Fiske 676,249
Brush holder, A. F. Batchelder 676,298
Brush holder, H. Geisenhoner 676,308
Bucket, clam shell, J. C. Hoshor 676,189
Buckle, sheet metal, J. F. Molloy 676,198
Bung and means for drawing same, H. Bauer 675,921
Burial casket lowering apparatus, Breed & Warther 675,928
Burner, A. W. Straight 676,374
Burner for glowing lights, O. Reitz 676,153
Buttons, hangers, etc., fastening device for, J. E. Platon 676,273
Cabinet or paper case, J. T. Hoyt...676,315, 676,317
Cable splicing tool, C. Wigtel 676,292
Can closing apparatus, R. A. Hall 676,229
Can cooling machine, E. Manula 676,070
Cane stripper, J. Hester 676,252
Car coupling, M. A. Brown 676,218
Car, dumping, J. J. Souder .....676,102 to 676,104
Car, dumping, A. Roesgen 676,278
Car, dumping railway, J. J. Souder 676,101
Car, grain, M. Sorlle 676,052
Car seat, H. Witte 676,169, 676,170
Car side bearing, W. S. Rogers 675,977
Car step, extension, H. E. Youtsey 675,916
Car step, extension, R. C. Smith 675,983
Car track cleaning attachment, hand, A. Hagg 676,385
Car wheels to their tracks, device for anchoring, J. C. Wands 676,167
Carbonated water holders, apparatus for filling, Koch & Hall 676,366
Carbureter, R. Y. Thomas 676,054
Cartridge, H. Henneberg 676,000
Cartridge charging machine, L. Chambon.... 675,932
Cartridge clip, R. W. Scott 676,371
Cartridge shell crimping tool, N. D. Holbrook 676,255
Cash indicator, J. H. Snow 675,984
Cash or parcel carrier or distributer, W. H. Sheppard 676.050
Cash register, T. H. Blair 676,216
Cash register, E. H. Jahnz 676,386
Cask, H. A. Cohn 675,882
Chain links, machine for imparting uniform dimensions to, G. Paul 676,078
Channel opening machine, L. Goddu 676,362
Checkrein holder, E. Hagberg 675,997
Chimney cowl, D. Keller 675,952
Chisel, M. Sperleder 676,063
Chute for wagons, etc., I. L. Vansant 676,212
Cigar package, C. Johann 676,136
Cigar tip cutter and lighter, G. Weiss 676,404
Circuits, regulating device for alternating current, E. Thomson 676,344
Clock signal, electric, H. B. Vaughan 676,346
Clock striking mechanism, J. Gutekunst.... 675,890
Clod crusher and land leveler, G. E. Blaine. 675,924
Clothing, etc., holding device for, C. V. D. Blair 675,925
Coin controlled apparatus, H. S. Mills..... 676,146
Coin controlled machines, bogus-coin detector for, P. E. Berger 676,114
Color sample, R. J. Simpson 676,373
Combing machines, idler-pulley for wool, F. W. Nlus 676,046
Composition of matter, N. B. Mayer 676,095
Concentrator, J. Mellein 676,388
Container, flexible, B. E. D. Stafford 676,012
Cork extractor, J. Roggінger 676,205
Cork puller, E. Walker 676,013
Corset stiffeners, etc., spring for, H. Torley 676,210
Cotton chopper and cultivator, combined, J. E. B. Ogden 675,968
Couch, box, I. Karpen 676,004
Couch, box, G. E. Bedell 676,215
Curb, cistern, W. B. Dorward 676,355
Currycomb, C. Fockens 676,358
Curtain fixture, A. B. Smith 675,982
Cut off, rain water, W. T. Mills 675,963
Cutting table, bias, F. B. Granger 676,228
Damper regulator, furnace, J. Bruss 676,120
Dispensing apparatus, C. S. Goodfellow.... 676,130
Display and stock cabinet, combined merchant's, C. Sparks 676,157
Distribution system, H. F. Parshall 676,339
Door, Twiss & Cook 676,284
Door check, pneumatic, S. W. Peregrine.... 675,903
Door operating mechanism, M. J. McDonnell 676,149
Dovetail joint, A. Pfeil 676,079
Drapery hanger, J. Langlois 676,397
Drier, C. Wacker 676,165
Drying apparatus dust removing device, M. Konig 676,140
Drill. See Electric drill.
Dump and elevator, portable, P. E. Erickson 675,941
Dyeing apparatus, E. E. Plantrou 676,151
Dyeing, etc., machine for, C. E. Drew..... 676,222
Educational appliance, J. A. Healey 676,313
Egg carrying case, W. Craine 676,354
Ejector, duplex steam, W. D. Labadie..... 676,239
Electric drill, J. C. Lincoln 676,043
Electric meter, L. E. G. Cauro 675,931
Electric meter, L. Gutmann 675,996
Electric propulsion system, H. Halberstadt.. 676,035
Electric switch, E. Schulz 676,280
Electrical apparatus coils, protecting device for, P. H. Thomas 676,105
Electrical contact making device, P. R. Papin 676,098
Electrical distribution system, E. J. Berg.. 676,300
Electrical impulses, reception and retransmission of, A. Muirhead 676,006
Electrically lighting light ships, etc., means for, J. H. Junge 676,365
Electrode, primary battery, W. T. Seddon.. 676,281
Electrodes, apparatus for making, G. J. Miller 676,333
Electrodes for storage batteries, etc., making, G. J. Miller 676,334
Electrograph, M. Beck 675,878
Elevator safety appliance, Gracey & Gfeller 675,888
Elevator safety catch, H. Jewell 676,258
Elevator safety device, C. R. Pratt 676,152
Engine attachment, traction, C. E. Anderson 675,994
Engine eccentric, steam, O. P. Holt..... 676,038
Engine oil feed, explosive, G. J. Weber.... 676,403
Engine starting device, explosive, Z. S. Taylor 676,247
Engines, device for preventing racing of marine, J. T. Parry 675,969
Engines, electric igniter for explosive, J. V. Rice, Jr. 676,099
Engines, spraying and vaporizing device for crude oil explosive, F. Van Duzen..... 676,285
Eye cups, F. E. Young 676,379
Eyeglasses or spectacles, lens mount for rimless, A. Leo 675,957
Farm gate, H. P. Wellman 676,107
Feeder and band cutter, self, W. Brandon. 676,301
Fence, wire, G. S. Bartholomew 676,023
Fertilizer grinder and separator, D. Z. Clay 676,175
Fire alarm, automatic electric, W. J. Brewster 676,085
Firearm, magazine, Linville & Endicott.... 676,094
Fire extinguisher, J. H. McConnell 676,148
Fire extinguisher and alarm, combined, J. G. J. Davis 676,221
Fire pot, C. F. Schenk 675,908
Fireproof blind, W. R. Kinnear...675,953 to 675,955
Fireproofing and preserving fabrics, etc., A. Nieske 675,901
Fish cleaning apparatus, Munn & Lotz..... 676,073
Flask, siphon, I. Ripper 676,009
Floor, sidewalk, or window cleaner, F. W. Richter 675,907
Fluid meter, H. H. Frost 675,943
Fluids, apparatus for compressing or exhausting elastic, W. Reavell 676,080
Fluids of different densities, apparatus for separating, D. H. Haywood....675,891, 675,949
Folding box, Z. B. Webb 676,015
Folding box, D. Drawbaugh 676,393
Forge, H. B. Keiper 676,323
Fountain, F. W. Darlington 675,883
Furnaces, condenser for fumes of metallurgical, E. Balbach, Jr 676,380
Fuse for projectiles or torpedoes, distance, G. Klumak 676,139
Fuse, safety, L. Abendroth 675,993
Game apparatus, H. Barghausen 675,920
Garment, F. H. Sprague 675,985
Garment, W. P. McGuire 676,336
Garment fastener, K. Zuber 676,294
Gas and air heater for burners, C. M. Seifert 675,981
Gas and steam generator, combined, S. D. Mott 676,199
Gas, apparatus for making water, H. Strache 676,245
Gas burner, oil, P. B. Spaulding 676,011
Gas burner regulator, R. Beese 676,173
Gas burner self-igniting attachment, R. Beese 676,174
Gas generator, acetylene, J. W. Tallmadge. 675,987
Gas heater, G. White 676,017
Gas lines, automatic drip for, J. W. Hough. 676,065
Gas meter, prepayment, Hawkyard & Braddock 676,231
Gas meters, coin freed prepayment mechanism for, A. Stansfield 676,206
Gas producer, A. Laughlin 676,329
Gas producer, W. Garrett 676,394
Gas, purifying water, H. Strache 676,209
Gas retort charging apparatus, G. A. Bronder 676,025
Gate. See farm gate.
Gate, L. W. Seckler 675,980
Gear generating cutter, E. R. Fellows..... 676,226
Gear generating machine, E. R. Fellows.... 676,227
Gear, power transmission, R. Jackson.... 676,040
Gearing, toothed, Humpage & Jacques 676,233. 676,234
Glass and making same, ornamental, C. Byrnes 676,122
Globe guard, Lepel & Schultze 676,331
Glue applying machine, M. D. Knowlton.... 676,237
Grain drill, F. J. Noechel 676,076
Grinding and polishing apparatus, C. W. Nystrom 675,967
Grinding machine, roll, J. Dawson 675,936
Grinding mill, ball, C. Hofmann 676,254
Gun, shot, C. S. Evans 676,181
Gun, spring air, A. Schoenhut 676,279
Halter for horses or cattle, B. S. Thomas. 675,910
Handle, G. S. Allen 675,917
Harvester, potato, H. H. Higdon 676,188
Hat box, B. F. Porter 676,274
Hat mark and guard, combined, J. S. Wright 676,293
Hay cocking machine, D. W. Valleau..... 676,058
Hay fork, F. J. Vessely 676,287
Hay loader rake, J. Dain, Jr 676,304
Hay rake and loader wheel, G. A. Johnson. 676,320
Heater, J. J. Herbrecht 676,037
Heaters, means for controlling electric, E. E. Gold 676,309
Heating and circulating apparatus, water, J. D. Lafreniere 676,093, 676,192
Heating apparatus, I. V. Arvonen 675,919
Heating apparatus, Conway & McCarthy.. 676,176
Heating apparatus, liquid fuel, P. J. E. E. Chambost 676,063
Heating device, A. Elmendorf 676,180
Hitching fetter, animal, Rommel & Owen.. 676,243
Hod, W. G. Avery 676,022
Hod, J. W. Guerin 676,250
Hoops upon jacketed cans or other vessels, machine for tightening wire, J. G. Hodgson 676,232
Horseshoe, rubber tread, E. F. Culbertson. 676,086
Hot air cabinet, H. A. Dygert 676,124
Hot air furnace, J. P. Schaffer 675,978
Hub, vehicle, G. C. Lewis 676,042
Hydraulic machines, means for varying areas of plungers of, W. J. Hagman.... 676,251
Ice making apparatus, W. B. McCrosky.... 675,965
Incandescent lighting device, J. P. Keating. 675,951
Index for ledgers, etc., G. C. Sheperd..... 675,909
Inhaler, J. Y. McFarland 675,966
Insect destroyer, L. Ricard 676,341
Insect repelling fabric, A. M. Whipple..... 676,375
Jar cover, S. I. Sutton 675,956
Jewel holder and fastening device for cord collars, S. B. Robertson 676,277
Joint. See Dovetail joint.
Kitchen table, C. W. Fox 676,127
Knitting machine, rib, R. W. Scott 676,372
Label attaching machine, W. S. Sherman... 676,244
Labeling machine, E. N. Gilfillan 675,887
Lamp, incandescent electric, L. Lobenthal, 676,068, 676,069
Lamp, incandescent electric, J. McCullough. 676,074
Lamp, incandescent gas, L. T. Alton..... 676,020
Lamp reservoir, vapor, J. J. Busenbenz.... 676,121
Lamp socket, incandescent, W. H. Perkins. 676,202
Lamp, switch, electric, C. Wagner 676,289
Lamps, elastic support for arc, F. Wilkie. 676,377
Last, E. L. Goding 675,944
Lathe, automatic turning, H. W. Carter.... 676,123
Lawn sprinkler, A. Gerdum 676,186
Ledger holder, F. W. Briggs 676,217
Ledger, loose leaf, E. L. McClure. (Reissue) 11,914
Level rod, W. E. Sullivan 676,161
Level, spirit, J. Lemle 676,330
Levers, etc., means for locking controlling, F. C. Billings 676,117
Lightning protector for electrical apparatus, F. Gattinger 676,185
Limb, artificial, H. Wenneborg, Jr 675,912
Limb hinge joint, artificial, J. F. Rowley.. 676,081
Line grip or holder, T. C. Newlon 676,390
Linotype machines, mechanism for spacing and justifying tabular work on, W. Fletcher 676,306
Lock, I. W. Abbott 676,295
Lock shield, J. Jarvis 676,001
Locomotive stand pipe, C. Gulland 675,889
Match box, F. W. Campbell 675,879
Measuring ribbon and lace cabinet, self, H. E. Rexroad 676,369
Measuring tape, shoemaker's, Breitschuch & Voigtlander 676,351
Meat chopper, J. W. Weaver 676,347
Mechanical movement, H. B. Keiper 676,324
Metal paper in endless strips, making, C. Endruweit 676,357
Metal rod bending machine, A. N. Cameron. 676,027
Milling cutter, H. Liebert 675,958
Miter box, E. A. Westphal 676,109
Morris chair, W. H. Jackson 676,256
Motion, mechanism for converting reciprocating into rotary, J. Houlehan 676,039
Motion, mechanism for converting rotary into reciprocating, B. H. Locke 676,044
Motor control system, A. G. Davis 676,305
Mower, C. W. Harris 676,230
Musical instrument, automatic, A. Junghans. 676,002
Musical instrument, mechanical, C. L. Davis 676,031
Musical instrument valve, C. G. Conn.... 676,029
Non-halation plate, P. Plagwitz 676,272
Numbering and dating machine, E. G. Bates 676,083
Numbering machine, automatic, E. G. Bates, 676,082, 676,084
Nut lock, W. E. White 675,991
Nut shelling machine, J. A. Grimm 676,187
Oil cup, N. T. Wiley 675,992
Oven, portable, M. A. Tipney 675,911
Package for ice cream and wrapper therefor, W. Waud 676,213
Packing case, B. F. Martin 675,961
Paper, building, J. T. Ferres 676,183
Paper or sheets, package for, J. T. Hoyt.. 676,316
Paper stock washing machine, T. C. Cadwgan 675,930
Paste pot or jar, C. B. Gordon 675,945
Paste pot or jar, F. F. Raymond, 2d, 675,970 to 675,973
Penholder, A. Bergmann 675,923
Percussion drill, B. H. Locke 676,045
Phase compensation, producing, L. Gutmann 675,995
Phonograph or graphophone reproducer, I. W. Norcross, Jr 676,270
Phonograph record blank, J. W. Aylsworth.. 676,111
Phonographic recording apparatus, T. A. Edison 676,225
Photographic films with sensitive emulsions, apparatus for coating, C. E. Hearson.. 676,314
Photographic negative vignetter, J. M. Dow 676,392
Pianoforte, H. S. Reading et al 676,275
Piano player, mechanical, C. L. Davis..... 676,030
Picture and curtain hanging device, combined, C. McClelland 676,097
Pictures, mirrors, etc., sheet metal frame for, E. Oldenbusch 676,200
Pipe. See Locomotive stand pipe.
Pipe fitting, soil, J. P. Heeney 676,132
Pipe union, Verge & Dagain 676,286
Pistons and piston rods of gas or other motors, means for cooling, H. E. Ebbs.... 675,886
Pittman box, J. W. Latimer 675,958
Planter, corn, R. P. Morden 676,268
Platen press, A. & C. H. Eberle 676,224
Plow, reversible wheeled, E. Manes..... 676,005
Plow, wheeled, A. Lindgren 676,265
Pneumatic tool, J. J. Tynan 676,055
Pole piece, means for securing, H. G. Reist 676,276
Printing plate, R. Maxwell 675,898
Printing press, J. F. McNutt 676,241
Propeller, marine, J. D. Brown 675,929
Propulsion of boats, yachts, etc., J. G. Villar 676,164
Pump, centrifrugal, F. B. Warring 676,014
Pump, chain, W. S. Pitman 675,905
Pump, non-corrodible, J. J. Caylor 676,353
Pump, vacuum, Wheeler & Mashek 676,168
Pumping apparatus, water, C. Aneshaensel.. 676,214
Punching machine, G. M. Rogers 676,242
Puzzle, J. Lechner 676,264
Racing trolley track, C. W. Hutchinson.. 676,190
Racking purposes, combined plug and valve for, N. H. Medbery 676,195
Radial drill, A. Mill 676,197, 676,389
Rail joint, W. J. Nix 676,338
Railway fog, L. C. Williams 675,914
Railway frog or like structure, M. D. Pratt 676,008
Railway, pleasure, W. M. Lease 676,193
Railway signal apparatus, J. K. Hoddinott. 676,092
Railway system, electric, G. Westinghouse, Jr. 676,108
Railway track center gage, J. E. Murphy.. 675,964
Railway tracks, apparatus for surfacing, W. Goldie 676,129
Railway tracks, surfacing, W. Goldie..... 676,128
Railway train collisions, means for preventing, J. Skopec 676,343
Railway train stopping appliance, Steiner & Boltshauser-Schmid 676,207
Receptacles, means for closing, C. Suhl... 676,160
Reciprocating parts, device for regulating the elasticity and throw of, A. M. Strenge 676,246
Reel seat, J. W. Bell 676,348
Refrigerator car, ventilator, C. E. Lucas.. 675,960
Refrigerator ice pan and rack, J. M. Martin 676,071
Refrigerator shelf, C. W. W. Ball 676,381
Refuse burner, L. A. Dean 675,884
Rein holder, W. E. Hill 676,133

(Continued on page 398)

WOOD or METAL Workers



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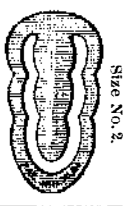

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