

Important Items.

BACK NUMBERS AND VOLUMES—We have the following numbers and volumes of the SCIENTIFIC AMERICAN, which we can supply at the annexed prices—Of Vol. 1, 40 numbers, bound, \$1.75. Of Volume 6, all—price in sheets, \$2; bound, \$2.75. Of Volume 8, none complete, but about 30 numbers in sheets, which will be sold at 50 cents per set. Of Volume 9, bound, \$2.75. Of Volume 10, all except Nos. 17, 25, 26, 27, 28, 29, 30, 41, and at the subscription price. Complete Volumes will be ready for delivery in about two weeks. Price \$2.75 bound; \$2 in sheets.

MODELS—We are receiving almost daily, models of inventions which have not the names of their inventors marked upon them. This usually prevents us from taking any notice of them whatever. We shall esteem it a great favor if inventors will always attach their names to such models as they send us. It will save us much trouble, and sometimes prevent the model from being mislaid.

RECEIPTS—When money is paid at the office for subscription, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a bona fide acknowledgment of the receipt of their funds.

GIVE INTELLIGIBLE DIRECTIONS—We often receive letters with money enclosed, requesting the paper sent for the amount of the enclosure but no name of State given, and often with the name of the post office also omitted. Persons should be careful to write their names plainly when they address publishers, and to name the post office at which they wish to receive their paper, and the State in which the post office is located.

BINDING—We would suggest to those who desire to have their volumes bound, that they had better send their numbers to this office, and have them executed in a uniform style with their previous volumes. Price of binding 75 cents.

INFALLIBLE RULE—It is an established rule of this office to stop sending the paper when the time for which it was prepaid has expired, and the publishers will not deviate from that standing rule in any instance.

FOREIGN SUBSCRIBERS—Our Canada and Nova Scotia patrons are solicited to compete with our citizens for the valuable prizes offered on the next volume. [It is important that all who reside out of the States should remember to send 25 cents additional to the published rates for each yearly subscriber—that amount we are obliged to pre-pay on postage.]

Money received at the SCIENTIFIC AMERICAN Office on account of Patent Office business for the week ending Saturday, Sep. 1, 1866:—

I. F. B. of Ga., \$30; N. & S., of L. I., \$30; W. C. W., of Mass., \$10; F. & P., of N. Y., \$30; J. S. B., of O., \$30; H. & R. S., of Ga., \$25; N. W., of Ala., \$25; A. W. W., of Miss., \$20; W. N. M., of Mass., \$30; C. L. N., of N. Y., \$55; E. G., of N. J., \$25; J. H. S., of Mich., \$55; N. S. W., of N. Y., \$468; C. W. B., of Ct., \$10; J. S. T., of N. Y., \$30; I. J. O., of N. Y., \$30; S. A. H., of Mass., \$55; B. & H., of N. Y., \$25; J. G. K., of N. J., \$30; T. P., of Md., \$30; T. A. A. B., of Ga., \$50; H. H. F., of Miss., \$50; J. N., of N. Y., \$20; C. T. W., of Mass., \$30; J. K., of N. Y., \$15; P. V. W., of N. Y., \$30; S. P. B., of N. Y., \$56;

J. W. H., of N. Y., \$30; H. R. W., of Ct., \$30; C. L., of O., \$30; A. M. B., of N. Y., \$10; J. S. R., of Ala., \$36; M. & A., of N. Y., \$25; R. S. P., of N. Y., \$25; E. A. C., of Ct., \$30; J. C. S., of Mass., \$25; D. W., of N. Y., \$2; M. P. D., of N. Y., \$30; J. S. A., of Mass., \$55; T. G., of N. Y., \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Sept. 1st:—

C & W., of Tenn.; R. P., of London, Eng.; E. G., of N. J.; J. S. B., of O.; T. G., of N. Y.; N. W., of Ala.; H. & R. S. S., of Ga.; A. W. W., of Miss.; S. G., Jr., of N. Y.; R. W. B., of Mo.; O. W. M., of Ct.; A. F., of Mass.; C. L. N., of N. Y.; B. & H., of N. Y.; D. W., of N. Y.; J. H., Jr., of N. Y.; J. S. R., of Cal.; S. F. P., of N. J.; H. B. W., of Ct.; M. & A., of N. Y.; J. C. S., of Mass.; R. S. P., of N. Y.; H. S., of Mich.; N. & S., of L. I.; J. S. A., of Mass.

To CORRESPONDENTS—Our notices to correspondents are necessarily omitted this week.

INDEX.

Agricultural Implements, Great Trial of 412
Ants, To Destroy 3, 222, 275
Apple Parer, Brown's, 2 figs. 380
Augers, Hoagland's, 1 fig. 295

Ballast Trimming for Steamboats Sedgwick's, 2 figs. 322
Balsam, Stryker's 151
Barrel Head Machine, Osborn's, 1 fig. 36
Barrel Head Machine, Heacock's, 1 fig. 308

Beans for soup 209
Bedsteads, Wardrobe, Hageman's 44
Bedsteads, Invalid, Daniels', 1 fig. 356
Bevel Plane, Wheeler's, 2 figs. 309

Bit, Expansible, Gale's, 3 figs. 84
Bit, Fastening, Streeter's, 3 figs. 320
Bit, Fastening, Nichols', 3 figs. 336
Blacking, Waterproof 245, 347
Blackberry Cordial 350, 350

Blind Slat Machine, Sweet & Noyes' 28
Blind Slat Machine, Hastings' 116
Boilers, Steam, Bird's, 2 figs. 12

Boilers, To prevent Incrustations in, Weissenborn's 95
Boot Supporter, Dick's, 2 figs. 183, 228
Boot and Shoe Stretcher, Holden's 276
Boot Crimping Machine, Horton's, 2 figs. 352

Boring Machine, White's 258
Bottles, New, Brown & Bloeklen's, 2 figs. 45
Brake, Car, Rice's, 68
Brake, Steam, Wright's, 93

Brake, Car, Laughlin's 100
Brake, Car, Lowbridge's, 250
Brass, To Clean 9
Brass Formed by Galvanic Agency 160
Brass Kettle Machine, Camp's, 164

Bricks, Tubular 72
Bridge, Wire Suspension, Yandell & Johnson's, 3 figs. 105
Bridge, Fields', 4 figs. 185

Bridge, R. R., Gamble's, 3 figs. 408
Brick Kiln, Speights', 2 figs. 3
Brick Machine, Young's 160
Brick and Brick Work, Wire 390

Brick, Patent, Till's, 6 figs. 400
Broth for Sick Persons 155
Bucket for Chain Pumps, Morris', 2 figs. 244

Bulleys, Extracting 186
Bullet, Rifle, 2 figs. 245
Bullet, Mould, 276
Butter Worker, Gore's, 1 fig. 44

Calf, Mechanical 338
Camphor, 406
Candles, Palm Oil 72
Candles, Tard 205

Carriage, Holmes', 2 figs. 385
Cars, Burden, Hoyle & Kioh's 52
Cars, Railroad, Wright's 100

Car Ventilator, Marvin's 124
Car Ventilator, Corbett's 236
Car Ventilator, Babbitt's, 3 figs. 273
Car Coupling, Hook's, 3 figs. 324, 270

Carriage Wheels, Skelly's, 2 figs. 348
Carriage measure, Coburn's, 4 figs. 360
Cart, Self-loading, Z. C. Butt's 218

Card Distributor, Duryea's 252
Carving Machine, Allen's 68
Casks, Turning from solid wood, Osborn's, 1 fig. 387

Castors, Furniture, Roux's, 2 figs. 208
Cements, 55, 157
Chain Hook, Straus's, 1 fig. 21
Chain Link Machine, Wyckoff's, 3 figs. 122

Damper for Chimneys, Fisher's, 124
Deck and Saloon Cabin for Steamboats, Jackson's, 2 figs. 348
Deodorizing Putrid Matter for Manure 274

Desks for Schools, Woodcock's, 1 fig. 20, 220
Directory for R. R. Stations, Richardson's, 236
Disinfectant, Cheap 395

Distances, Measuring by Sound 350
Dock, Sectional Floating, Everson & Ricard's 12
Document Holder, Woodbury's, 1 fig. 60

Doors, Weather Strip for, Croke's, 2 figs. 388
Dredging Machine, Howard's 234
Drill, Rock, Dunham's, 3 figs. 161

Drill, Hand, Harris', 1 fig. 340
Driving Wheels, Chase's, 3 figs. 225
Dumb Waiter, Murtaugh's 244

Dyeing, Art of 122, 130, 133, 146, 164, 162, 170, 178, 186, 194, 202, 210, 218, 226, 234, 242, 250, 258, 266, 274, 282, 290, 304, 312, 320, 328, 335, 344, 352, 360, 368, 376, 384, 392, 400, 408

Elbows and Stove Pipes to cut by Rule, 2 figs. 50, 66
Electuary, Castor Oil 194
Elevator, Otis', 1 fig. 85

Emery Paper 115
Engines, Hot Air, Napier & Rankin's 1 fig. 19
Engines, Steam and Ether 24

Engines, Re-acting Spring for 49
Engines, Oscillating, Woods', 6 figs. 217, 164
Engines, Fire, Adams, 2 figs. 315, 276

Engines, Rotary, Thomas', 2 figs. 250, 316
Erie R.R. Statistics 411
Escape from Houses on Fire 321

Essences, Flavoring 297
Excavator, Manure, Hurst's, 1 fig. 132
Excavator, Manure, Williams' 244

Faucet, Self-closing, Butler's 20
Faucet for Water Pipes, Fowler's 283
Feeder for Steam Boilers, Bee's, 3 figs. 193

Fellies, Machine for Dressing, Wyatt's 108
Felt, Cure for 115, 131, 203
Fence, Field, Prindle's, 4 figs. 73

Fence, Wire 130
Ferry Bridge, Lawrence's 228
Filter, Water, Savley's 83

Fires, Extinguishing, Lowbridge's 250
Fire Arms, Neil's 44
Fire Arms, Newton's, 3 figs. 220

Fire Arms, Perry's, 3 figs. 304
Fire Alarm, Van Amringe's 411
Fish Hook, Cook's, 3 figs. 396

Flour Bolting Machinery, Hunt's 2 figs. 190, 484, 44
Flour Bolting Machinery, Taggart's 190

Flour Bolting Machinery, Stouffer's, 2 figs. 302
Flour Barrel, Pearsall's, 2 figs. 240
Fog Signals, etc., 3 figs. 312

Granaries, Ford's, 2 figs. 216
Grease, Feeder, Sutton's 83
Guano, Substitute for 238
Gum, Mezquite 88

Gun for firing chain shot, Wolter's 228
Gyroscope, 138
Hair Wash 231
Hair Tonic 290

Hair Oil 347
Ham Baking 257
Hammer, Nail, Noyes's, 3 figs. 34

Hammer, Atmospheric, Hughes's, 3 figs. 55
Hanger for Shafting, Peal's 20
Harrow Teeth, Securing, Magar's, 1 fig. 149, 20

Harness, Saddle and Trees, Selleck's, 4 figs. 164
Harvester, Lupton's 284
Hat Body Machine, Boynton's, 1 fig. 41, 2 fig. 90

Hat Poling Machine, Fuzzard's 186
Hay Press, Manny's, 2 figs. 392
Hemp and Flax Breaker, Hughes's 150

Hinge Machine, Miller's 204
Hog Pen, Hoffer's 114
Hog Pen, Abbe's, 1 fig. 308

Homing Mill, Bridenolph's, 2 figs. 268
Horse Shoeing Apparatus, Warlick's, 3 figs. 44
Horse Bit, Titus & Fenwick's 188

Horse Collar Block, Van Benschoten's, 1 fig. 404
Horse Power, Russell's 276
Horse Power, Fultz's, 1 fig. 385

Houses, Painting 90
Hub Boring Machine, Dole's 20
Hub Boring Machine, Casselman's, 3 figs. 89

Hydrodynamics 211
Hydrophobia 305
Ice Cream Freezer, Powell's, 1 fig. 292

Ice House, Parker's, 2 figs. 356
Ice Pitcher, Bakin's, 3 figs. 380
Implement for Boring the Earth, Adams' 172

Indigo, Florida 266
Infernal Machine, Russian, 4 figs. 368
Journal, Globular, Gill's 124

Lamp, Camphene, Bennett's 148
Lancaster Gun, 1 fig. 182, 168
Lantern, Morley's, 1 fig. 28

Lathe, Cahoon & Ross's 68
Lathe, Wentworth's 83
Lathe, Tugnot's 91

Lathe, Stephens's, 2 figs. 234, 194
Lathe, Bottom's 218
Lathe, Warth's, 2 figs. 377

Leather, Machine for cutting, Hath & Churchill's, 12
Lemons, To Keep Fresh 25
Life Boat, Hodgson's 21

Life Boat, Burdan's 186
Life Boat, Smith's, 204
Life Boat, Allen's 210
Life Preserving Doors, &c., Phieatt's 280

Lifting Jack, Carpenter & Powers' 100
Lightning and its Conductors 411
Lightning Conductor, Lyon's, 3 figs. 33

Liniment, Lethaen 161
Lock, Yale's, 4 figs. 337
Locomotive, Dutcher's 263

Loom, Bag, Copeland's 83
Loom, Yates and Clayton's, 2 figs. 91
Lubricator, Regester's, 2 figs. 165

Lubricator, Sutton's, 2 figs. 201, 172
Lubricator, Dixon's 308
Manure, Artificial 280

Maple Sugar, Clarifying 197
Match Making Machine, Adler's, 2 figs. 114
Match Box Machine, Hawes's 163

Meat Biscuit, Borden's 157
Medical Inspirator, Tighlman's, 2 figs. 289
Melodeon, Carhart's 260

Metal, Uniting Plates of, Carhart's 4
Metal, Bending Machine, Cumberland's 114
Microscope, Cheap 64

Milk Preserving 33, 64
Milk, Artificial 395
Mill, Flouring, Yule's 54

Mill, Grinding, Felton's 100
Mill Grinding, Weigles's, 3 figs. 225
Mills, Fanning, Keach & Stillwell's, 1 fig. 364

Mill Spindle, Naracon's, 1 fig. 213
Mineral, Valuable 64
Minnie Ball, 163

Mixer Box, Spear's, 1 fig. 257
Molding, 11 figs. 192
Mortising Machine, Benton's 83

Moth Preventive, 290
Motive Agent, New 332
Mowing Machine, Palmer's, 1 fig. 328

Mowing Machine, Trial of, 335, 345, 355
Muntz Metal, for Bolts 187
Nail Machinery, 100

Odometer, Thompson's, 3 figs. 134, 17
Oils, Testing Lubricating 237
Ointment and Oil Elder flower 160

Ores, Treatment of 99
Paddle Wheels, Champion's, 2 figs. 3
Paddle Wheels, Wallis', 3 figs. 251, 258

Paddle Wheels, Dehart's, 1 fig. 372
Painting 131
Pain of the Heart, Cure for 130

Paper New Material for 9
Paper from Wood, Blooman's, 1 fig. 43
Paper Feeder for Printing Presses, Baldwin's 156

Paraffin Machine, Baker's, 1 fig. 181
Paper Stock, Machine for Washing, Peaslee's, 1 fig. 265
Paper Ruling Machine, Baldwin's, 268

Paste for Envelopes 235
Patent Safe Machine, 2 figs. 331
Pavement Cast Iron 242

Pen, Glover's, 3 figs. 299
Pen, McClelland's, 266
Pendulum Detachment, Brown's, 2 figs. 176

Perfume of Flowers, to collect 249
Perfume of Flowers, Handkerchief 254
Photography 275
Philosophical Experiment, 1 fig. 272

Piano, Ackerly's 202
Pinch Bar, Cooley's 1 fig. 73
Pins, Safety, Shaud's 28

Pipes, Metal Cutting, Brighton's 106
Pistol, Repeating, Beal's, 2 figs. 404
Plow, Long Ice Cultivator, Hyde & Morse's, 1 fig. 393

Plow, Ditching, Lyon's 1 fig. 116
Plow, Standard, Estery's 126
Plow, Warlick 244

Plow, Planting, Snell's, 1 fig. 280
Plow, Long Ice Cultivator, Hyde & Morse's, 1 fig. 393
Plow, Gang, Hildreth's, 1 fig. 324

Plug for Steam Boilers 107
Potato Digger, Bundy's, 2 figs. 16
Potato Planter, Anderson's, 2 figs. 236

Potato Planting, 473
Potato Cooking 242
Polygraph, Ames', 2 figs. 242

Preparation for Boots and Shoes 166
Press for Printing Colors, Brown's 156
Press, Hay, Mann's 260

Printer's Forms, Locking, Sprague's, 3 figs. 28
Propeller, Seibert's, 3 figs. 65

Propeller, Tyson's, 1 fig. 300
Pulleys, Securing to Shafts, Clarine's, 3 figs. 77
Pump, Chandler's, 1 fig. 9

Pump, Tower's, 2 figs. 68
Pump, Gorsuch's 110
Pump, Burnham's 124

Pump, Cowing's 226
Pump, Carpenter's, 5 figs. 244
Pump, Wyckoff's 244

Pump, Kirkwood, 2 figs. 396
Purchase suspended, Brown's 166
Quercitrine 155

Railway Chain Plate, Strait's, 2 figs. 62
Railroads, Improvement in 100
Railroad Tracks, Bakin's 26

Reaping Machines, History of, 89 figs. 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128, 136, 144, 152, 160, 168, 176, 184, 192, 200, 208, 216, 224, 232, 240, 248, 256, 264, 272

Report of the Commissioner of Patents 110, 347
Rifle Breech Loading, Perry's, 3 figs. 4
Rifle Blasting Implement, Brown's, 2 figs. 125

Roller and Harrow, Hill's, 1 fig. 20
Rope Machine Robinson's, 4 figs. 17
Rose Bugs, to Destroy 297

Rotary Motion, Amadon's 20
Rule for Calculating the Weight of a Casting 243
Safes, Chimney, Clark's, 2 figs. 263

Salt, Manufactured of 114
Salt, Purifying 136
Saneratus in Bread 165

Sanitary Substances, 301
Sash Fastener, Tyrrell's 152
Sash Fastener, Thomas' 64

Sash Fastener, Rode's 283
Sash and Molding Mill, Morse's, 1 fig. 249
Sashes, Adjusting, Payne's 283

Sausage Stuffer, Battle's 124
Saws, Cylindrical, Hay's 52
Saws, Filing, Buck's 68

Saws, Hanging, Chapman's 68
Saws Grinding, Clemson's 68
Saws, Reciprocating Ketcham's 124

Saws, Circular 275
Saw Mills, Andrews's, 2 figs. 66
Saw Mills, Brown's, 1 fig. 292

Sawing Down Standing Trees, Ludwig's, 2 figs. 410
Saw Mill Dogs, Russell's, 1 fig. 132

Sawing Firewood, Efferem's, 1 fig. 9
Sawing Machine, Young's, 3 figs. 212, 23
Sawing Machine, Fulgham's, 1 fig. 76

Sawing Machinery, Fulgham's, 1 fig. 409
Sawing Machines, Wicks', 1 fig. 97
Sawing Machine, Squire's, 2 figs. 129

Sawing Machine, Fox's, 4 figs. 401
Sawing Piles under water, Palen's, 2 figs. 116

Scaffolds Bracketts, Dixon, 5 figs. 124
Scales, Sampson's, 3 figs. 160
Scales, McPherson's, 2 figs. 221, 166

Scrofula, Cure for 166
Seed Planter, Andrews, 2 figs. 252
Seed Planter, Wakefield's, 2 figs. 369

Seed Ticks 68
Seeding Machine, Brown's 172
Separation, Grain, Barker's 4

Separation, Grain, Mackey & Smith's, 1 fig. 183
Separation, Grain, Bedwell's, 2 figs. 135

Separation, Grain, Bowen's, 1 fig. 201
Separation, Gold, Addison's 164
Sewing Machine, Van Geison's 98

Shaving and Felly Cutting Machine, Smith & Cowles, 2 figs. 228

Shears Blade's, Welding Steel on 10
Sheep Shearing Machine, Lancaster's, 1 fig. 344, 266

Shingle Machine, Speed & Bailey's, 28
Shingle Machine, Conrod's, 1 fig. 180

Shot Explosive, Tibbals, 44
Shoat Alarm, for ships, Devlin's 124
Shutter, Fire Proof, Austin's, 93

Shutter, Iron, Mettam's, 68
Shuttle Guard for Looms, Harris', 234
Shuttle Improvement, Marble's, 276

Shuttle Improvement, Litchfield's, 276
Skates, Sanford's 196
Silk Manufacture in England 91

Silver Plate to Clean 16
Silvering Looking Glasses, Webster's, 233
Slate Frame, Young's, 12

Slate Cutting Machinery, Keyes', 1 fig. 409
Slate Quarrying, Brunner's, 5 figs. 204

Slide Rest, Van Horn's, 266
Slide Rest, Noyes', 288
Slide Valve Gear, Schenck's 268

Smoothing Irons, Heating, Boynton's, 3 figs. 180
Snails, Use of 195

Snake Bites, Cure for 147
Soldering Machine, Stevenson's 164

Spark Arrester, Magoon's 52
Spark Arrester, Richard's 284
Spark Arrester, Wilder's, 2 figs. 140

Spark Machine, Wootton's, 4
Spoke Machine, Richardson's, 2 fig. 84
Spiritual Machine, 1 fig. 162

Spirit Level, Evan's, 2 figs. 265
Spokes, Tenoning, Sibbett's, 3 figs. 52

Sportsmen, And Receipt for 267
Spring Balances, Beckwith's, 140

Spring Carriage, Murgatroyd's, 208
Spy Glass, Stationary, 1 fig. 101
Staging, Portable, Goolman & Morris', 1 fig. 340

Statistics of Patents in 1853 267
Statistics of Coffins 267
Stave Machine, Hobson's, 2 figs. 17

Stave Machine, Hutchinson's, 3 figs. 41
Steam Navigation, American 51
Steam Gauge, Beaumont, 2 figs. 92

Bolt Machine 286, 364
Bolts, Dies for making 158
Bombs, Shells, &c. 78
Books, Binding, &c. 402
Books, Binding the Back of 110
Books, Trimming 412
Book Clasp 346
Book Jacks 314
Boot Crimping Machine 126, 278, 286, 314
Boot Forms 254
Boots and Shoes 14, 238
Boot and Shoe Soles, Machine for cutting 142, 322 [2], 330, 370
Boot and Shoe Soles, Gutta Percha 322
Boot and Shoe Soles, Polishing 294
Boots and Shoes, Tugging 338
Boring Posts, &c. 354
Boring and Turning Wood 346
Boring Cylinder 330
Boring and Planing Metal Machine 142
Boring Machine 118, 206, 278
Bottle Fastening 362, 370
Bottles, Filling, Screw Threads in the neck of 386
Boxes, Paper 158
Boxes, Forming 174
Boxes, Wooden 142
Boxes, Sheet Metal 94
Brace Bits securing in sockets 294
Brace for supporting garments 314
Brace for Piano Frames 143
Brackets 70
Braiding Machine 386
Brake for Vehicles 330, 230
Brakes, Car 46, 78, 86, 110, 142, 158, 230, 254
Brake Blocks for R. R. Cars 158
Bread, Process for making 214
Brick Kilns 222
Brick, Manufacture of 230, 330, 322
Brick Machines 6, 38 [3], 54, 70, 338 [2], 314 [2], 412
Brick Molds 184
Brick Press 354, 298
Brick Burning 314
Bridges, Swing 306
Bridges 402
Bridges, Ferry 222
Bridle Winkers 338
Bridle, Reins 214
Broom, Cleaning 214
Brushes, 111, 143, 174
Buckles 78, 354
Buckets of Plutur Wheels 30, 378
Buckets for Pumps 166
Buckets of Paddle Wheels 322
Bull Mould 184
Bumpers for R. R. Cars 322
Buoys for Raising Vessels 322
Burnings Fluid 394, 306
Burners Fluid 194
Butt Hinge Machine 206
Butter Cooler 394
Butter Worker 182

Cabins, Floating 314
Cable Stoppers 174
Caldron and Furnace Combined 182
Calorifiers 46
Cans, Self-sealing 142, 362, 402
Cans, Self-sealing 150
Cans for holding liquids 46
Cannon, Breech Loading 14, 166
Candlesticks 206, 402
Candle Mold Machine 150, 214, 370
Capstans for Ships 362
Car Coupling 362 [2]
Car Ventilator 34, 174, 230
Car Brake 333, 30, 394
Car Seats 330, 22, 30, 46, 110, 246, 402
Car, Dumping 38 [2]
Car Wheels, Forging 142
Cars, Running Gear of 110
Cars, Retaining on the track 182, 330
Cars, Excluding dust from 378
Cars, Apparatus for starting 33
Cars, Replacing on the track 394
Carriages 166, 370, 412
Carriage Seats 166
Carriage Wheels 174 [2], 2, 3
Carriage Bodies, Hanging 118
Carriage Tops, Setting Holes to 346
Carriage Coupling 114
Carriage, Joint Bodied 294
Carriage for Steam Fire Engine 298
Carpet fastening 330, 354, 311
Carpet and Carpeting 322
Carpet, Securing on Floors 118
Carps, Self-loading, &c. 222, 230, 278
Cartridges 70, 230, 306
Carding Machine 206
Cards, Cleaning 154
Card Exhibitor 254
Casters for Furniture 230
Catch for Bearings 214
Center Bit fastening 166
Chairs 233
Chairs, Dentists 306, 386
Chairs, Cabin 254
Chairs, Frames 30
Chairs, Rail Road 46, 142, 62
Chain and Cable 182
Chain S. Lk. Machine 206
Cheese Vats 118
Chimney Caps 6
Chimney Steep 193
Chimney for Steam Boilers 190
Chlorine, Compounds for neutralizing 46
Chuck for turning Eccentrics 330
Chuck for turning Elliptical Cylinders 142
Churns 110, 142, 182, 190, 338, 362, 394
Cider Mills 306
Clay Presses 354
Clay Kneading Machine 314
Clamp, Clothes 94
Clamp for lumber jointing Machine 233
Clocks, Callender 22 [2], 371
Clocks, Electric 30
Clock Fronts, &c. 236
Cloth Drying 386
Clothes, Ornamental Felt 311
Clothes, Waterproofing 114
Clothes Drying Apparatus 94
Clothes Pin Machine 278
Clover Hauler 102, 174, 190
Clover Seed Cleaner 286
Coal Distilling 378
Coal Cars, Hoisting and Dumping 216
Coal Screen 214, 230
Coal Holes 246
Coal Hoies, Covers for 246 [2]
Coffee Roasters 394
Coffins 118, 166, 222, 238
Coke 154
Composition for treating Rubber and Gutta Percha 394
Cone Valves, Two motion 330
Condensers for Steam Engines 14, 70, 118, 126, 243
Condensers for Fibrous materials 294
Cord, Planing and Twisting 206, 236
Cordure Machinery 298
Cork Machinery 347
Corn Planter 278, 330, 333, 346 [2], 336, 394
Corn Shellers 14, 78 [2], 206, 333, 346
Corn and Cob Crusher 182, 306, 402
Cotton Thread, Covering with Wool 110
Cotton Gins 142, 190, 216, 293, 338, 394
Cotton Gin Saws 412
Cotton, Ginning and Cleaning 46, 62, 128
Cotton Picker 70
Cotton Seed Planter 234
Cotton Seed Hulling 238
Counting Machine 22
Couplings, Car 214, 254
Coupling for Organs, &c. 322
Cranker Machine 193
Cramp, Carriage 150
Crank Connection 42
Creasing the edges of Leather Straps 294
Cresting Sheet Metal Pipes 306
Crown Head Attachment 322
Crowbar 166

Cultivators 86 [2], 142, 198, 214, 222, 230, 238 [3], 246, 264, 262
Cultivator, Teeth 174
Curtains for Water Wheels 298
Curtain Fixtures 6, 14, 33, 42, 166, 222, 246, 294 [2], 402
Cut off Valve 306
Cutters for Rotary Disks 330
Cutting Rags for making Paper 70
Cutting Cavities 346
Cutter Head for Irregular Forms 386
Cylinders, Turning Wooden 374

D
Daguerreotype Cases 38, 206, 386
Daguerreotype Plates, Polishing 22, 230
Daguerreotype Plate Holder 182, 254
Daguerreotype Mats, Beveling, &c. 346
Dampers for Ovens 46
Derricks 386
Decks for School Rooms 214
Dies for Copper Tube Machine 174
Dies for Bolt Forging 262
Dies for Ornamental Metal Tubes 254
Ditching Machine 222
Dock Holders for Horses 118
Doors 330
Doors for Baggage Cars 6
Door Fasteners 6, 254
Door Knobs 158, 402
Dough, Machine for Kneading 150
Dove-Tailing Machine 142
Drawbridge, E. R.
Drawbridge and Switch Telegraph 38
Draft in Locomotives 354
Drains for Sewers 314
Dredging Machine 150, 262
Dressing Conical Surfaces 346
Drills, Rock 46
Drills, Pawl 46
Drills, Metal 102
Drills for Artesian Wells 254
Drill Machine 336
Dry Docks 110
Dumb Waiters 2, 6
Duster, Bran 62
Dynamometers, Registering 126

E
Ear Trumpet 306
Egg Holder 394
Elastic Goods 30
Engines, Air 22, 378
Engines, Air and Steam 354
Engines, Fire 14, 102 [2], 166 [2], 206 [2], 278
Engines, Gas 262
Engines, Hydro pneumatic 254
Engines, Locomotive 30
Engines, Exhaust Pipes in Locomotive 214
Engines, Oscillating 14, 118, 150, 166, 298
Engines, Rotary 62, 78, 262 [2], 330
Engines, Vapor 306
Engraving, Galco Printers Rollers 402
Engraving Lights 150
Evaporating Apparatus 222
Excavators 86 [2], 246, 298, 354, 362
Excluding Dirt from R. R. Rails 222

F
Fabrics Printing Textile 386
Facing Bed for Grinding Granite 286
Fans, Revolving 126
Fans, Wheel 342
Fan Blower 331, 362, 378
Fatty Bodies, Purifying 38
Faucets 296 [2], 306, 322, 394
Feed Motion for Sawing Lumber 118
Feeding Water to Steam Boilers 314
Felties, Dressing 118
Felt Goods, Manufacturing 182
Fences 294
Fermenting Tuns for Beer 142
Ferry Boats, Guard for 126
File Cutting 370
Filtering Apparatus for Steam Boilers 158
Fire Arms 22 [3], 30, 46, 62, 70, 74, 86 [2], 102 [2], 142, 174 [2], 178, 230 [2], 222 [2], 230 [2], 246 [4], 254, 286, 298, 322, 346, 362 [3], 378, 402, 412
Fire Extinguisher 110, 222
Fire Proof Floor and Ceiling 246
Fireplaces 70, 214, 378
Fish Hook 330
Fish for Manure, &c. 214
Flags, Signal 142
Flag Dresser 6
Flax and Hemp Breaker 6
Flax Preparation 336
Flour Mill 150
Flour Mill 6 182, 198
Flour Packing Machine 126
Flour, Drying and Cooling 347
Fluids, Distributing 14
Flyers 118
Forceps, Surgical 94
Forging Machine 336, 394
Forks and Spoons 230, 246
Forks for Gold Diggers 206
Freeing Steam Boilers from Sediment 246
Freezers, Ice Cream 6
Friction Rollers 254
Fruit Dryers 142
Furnace, Artificial 142, 322 [2], 286
Furnaces 94
Furnaces, Hot Air 30, 38, 62, 118, 166, 174, 206, 294, 298, 322, 330, 378
Furnaces, Soldering 70
Furnaces, Glass 78 [2]
Furnaces, Iron 36
Furnaces, Zinc White 174, 370
Furnaces, Feeding Fuel to 230
Furnaces for Heating Buildings 78, 314, 394 [2]
Furnaces, Charcoal 238
Furnaces for Burning Wet Fuel 254
Furnaces for Locomotives 232
Furnaces for burning Bagasse 278
Furnaces, Steam Boiler 333
Fuse Tape 286
Fuse Stock for Bomb Shells 338

G
Galvanic Battery 294
Gaskets, Pastening for 38, 46
Gas Generators 30, 262
Gas from Wood 30
Gas Retort 38, 262
Gas Meter 38
Gas Heater 166
Gas Purifier 214
Gas Regulator 222, 254, 286, 306, 314, 354, 384, 394
Gas Burners, Valves for 222, 338
Gas Burners, Regulators for 14
Gas Lighter 338
Gas Burning Gridirons 362
Gates, Farm 78, 278, 298
Gauge, Self-regulating Water 198
Gates, Opening and Closing 246, 298, 395, 402
Gates, Balance Water 370
Gates Circular 322
Gauge, Steam 38, 402
Gauge, Saw 86
Gauge, Slitting 294
Gauge for Stair Rails 354
Generators, Steam 132, 254
Glass Toilet, Joint for 54
Glass, Manufacture of Plate 354, 337
Glue, Clarifying 174
Gold Collector 118
Gold Washer 166
Governors, Combination of 238
Governors for Marine Engines 337, 394
Granaries 62
Grain Mill 296
Grain Elevator 222, 246, 322
Grain Trough 298
Grain Measuring and Weighing 336
Grain Drills 312
Grain Bar, 10, 294, 306
Griddle 198
Grist Mill 14

H
Handles, Turning Fancy 160
Hand Rails for Stairs 166
Hanging Plane Stocks, &c. 346
Hammers, Forge 270
Hammers, Trip 246
Harness, Weavers 142
Harness, Saddle Trees 214
Harness, Saddles 78
Harness, Clasp for Looms 30
Harness for Looms 338
Harrows 118, 198, 24, 254, 372
Hay Making 22 [2], 30, 54, 86, 110, 198 [2], 142 [2], 143 [7], 150, 158, 174 [3], 182 [2], 190, 214 [4], 230, 238, 246, 254, 262 [3], 270 [3], 286 [2], 294, 298, 306, 314, 322, 346 [2], 354, 362, 370, 394, 402, 412
Harvester Rakes, Motion of 330
Harvester, Attaching Rakers Seat to 182
Harvesters, Cutters of 338, 346, 354, 394
Harvesters, Guard Fingers of 338
Harvester Rakes 338
Harvester Rakes 70, 94, 412
Harvesters, Changing from Reaper to 338
Hats, Ventilating 378
Hats, Manufacture of 142, 314 [2]
Hat Bodies, Felted 30, 174, 190, 354
Hat Bodies, Making 38, 46, 78
Hat Bodies, Sizing 370
Hat Bodies, Trimming 54
Hats and Bonnets, Pressing 182
Hay Making Machine 166, 262
Hay Press 262
Head Supporters for R. R. Cars 190
Heater, Air 193
Heating Wrought Iron Wheels for Forging 322
Heating Feed Water to Steam Boilers 346, 362
Heels for India Rubber Soles 363
Hemp Rotting Process 94
Hemp Cutters 402
Hides, Unhairing 142
Hinges 412
Hinges of Rolling Iron Shutters 270
Hinges, Strip 294, 371
Hods, Coal 78
Hoes 118
Hogs, Machine for Slaughtering 190
Holding Vessels in Docks 126 [2]
Horn Machine 294
Homes, Metallic 362
Hooks and Eyes, Attaching to cards 346, 362
Hoops, Manufacturing 198
Hoops, Cutting Locks of &c., 330
Hoop Jacks for Sailing Vessels 222
Hop Extracting Apparatus 150
Hop Frames 190
Horn, Splitting 43
Horse Shoe Machine 196
Horse Collars, Stuffing 214
Horse Power 262, 278, 299, 346, 356
Hose Coupling 246, 298, 330
Hot Water Apparatus 395
Hubs, Turning 46, 370
Hubs, Boring 254, 370
Hub and Axle Carriages 118
Hub and Axle Fastening 306
Hullers, Buckwheat 298
Huller, Cotton Seed 70

I
Ice House 330
Ice Pitcher 338
Inhaling Apparatus 94
India Rubber Cloth 142, 174
India Rubber, De-vulcanizing 306
Inkstand 386, 412
Ink, Printers 306
Instrument for Cutting out Stone 166
Iron Building 54, 14, 386
Iron Bridges 54
Iron Enamelling 54
Iron Wrought from the Ore 62
Iron Smelting 370
Iron Compressing 378
Iron Rolling 378
Irregular Forms, Cutting 412

J
Joints for Stove Pipes 330
Joints of Pipes for Artesian Wells 330
Journal Boxes for Carriages 142
Journal Boxes, Packing for 38
Journal Boxes, Alloys for 178, 394, 402
Journal Boxes, Glass 402
Kerosene, Manufacture of 238
Kettles, Machine for Forming 150
Kettles for Calcining Plaster of Paris 94
Key for Tuning Pianofortes 70
Knife for Cutting Leather for Whips 70
Knobs for Curtains, &c. 230
Knitting Machine 30, 38, 102, 110, 298 [2], 346, 354
L
Lables for Bottles, &c. 337
Ladder, Fire Escape 46
Lamps 6, 22, 30, 46, 94, 222, 130, 286, 346, 362
Lamp Caps 86, 190
Lamp Shades 158
Lamp Shade Protector 246
Lanterns 6 [2], 174 [2], 102, 150, 166, 362 [2], 402
Lanet 246
Lathes 46, 102, 74 [2]
Lathes, Slide Rest for 198, 262 [2], 294
Latches for Doors 174, 346
Leather Binding 78
Leather Splitting Machine 126, 190, 337
Leather, Composition for Dressing 142
Leather Extractive Tain n from 42
Leathe, Japanese 30
Leather, Teaching 182
Leather, Polishing 78
Leather Straps, Shearing 108
Legs, Artificial 378, 386
Legs for Pianos, &c. 354
Life Boats 14, 190, 14, 230
Life Pre-serving Seats, &c. 126, 142, 150, 174, 390, 392
Lifting, Attachment for 346
Lifting Jacks 78, 166, 132
Lime, Vauls 41
Lime Kilns 158, 412
Leading Rifle Cannon 246
Locks 78 [2], 118, 158, 198, 222, 246, 322, 338, 396
Locks, Slitting 294
Locks for Fire Arms 142
Locks, Alarm for 78
Looms, Controlling in Saw Mills 86 [2]
Looms 38, 46, 54 [2], 62, 86, 10, 118, 142 [2], 150 [2], 166 [2], 206, 230, 238 [2], 246, 278, 306 [2], 314 [2], 346 [2], 354, 356, 371, 386
Loom Beams 78
Looms Operating by Electricity 118
Looms, Shuttle for 158, 94, 337
Looms, Shuttle Motion of 396
Lubricants 158, 338, 178, 194
Lubricating Compounds 162, 298, 306, 354
Lubricating Cylinder of Steam Engines 94, 110
Lumber Dressing 371
Lumber Sawing 386

M
Mandrel for Holding Carriage Hubs 206
Mandrel for Cutting Tapering Sticks 298
Mandrel Circular Saw 378
Marquetry 186
Mast Hoops 70
Mash Machine 150
Match Machine 166
Measures for Tailors 70 [2]
Meat Chopping Machine 190
Meat Curing 222
Medicine Administrator 370
Metal Bars, Straightening 126
Metal Bars, Reducing 294
Metal Folding Machine 166
Metal, Cutting Sheet 370
Metal Supplying Furnaces 166
Metal Tubes, Rollers for making 262
Metals, Scraping 118
Metals, Amalgamating 306
Metals, Bending 118
Metals, Burnishing 278
Meter, Water 54, 70, 158, 370
Meter, Dry Gas 110
Meter, Fluid 94
Metals, 110, 136, 148, 150, 182, 347, 394
Mills, Grinding Butter in 94
Mill Bushes 62, 322
Mill Stones, Dressing 6, 14, 22, 94, 198, 330
Mill Stones, Hanging 386
Mill Step 346
Miter Box 102, 278
Miter Machine 214, 306
Miter and Bevel Square 338, 294
Mitering Printers Rules 346
Minerals, Machine for Crushing, &c. 18
Molds for Pressing Bonnet Frames 102 [2]
Molding Machine 168 [2]
Mortising and Tenoning Machine 230, 346
Mortising Machine, Feeding 166
Mosquito Curtains 38
Motion, Converting Reciprocating into Rotary 402
Moving Stereoscopic Pictures 330
Mowing Machine 206, 230, 306, 314, 346, 412
Mule, Self-acting 38
Multigrad Iron Fence 86
Musical Instruments 6, 86, 378
Music, Composing 314

N
Nail Machine 126
Needles, Sewing 38
Nozzle for Hose Pipes 286
Nut Machine 150, 331 [2], 362
O
Obstetrical Extractor 402
Odometer 70 [2]
Oils, Fictitious 246
Oil Cloth, Printing 314
Oil Dippers 386
Oil Press 386
Omnibus Register 86
Ordinance 222, 362
Ore, Machine for Crushing 110, 150
Ore, Working Franklinite 174
Ore, Cleaning 338
Ovens for Baking 110, 378
Oven for Cooking Hange 126
Overshoes, India Rubber 86
P
Packing for Stuffing Boxes 333
Paddle Wheels 338, 166, 206, 246, 346
Paddle Wheels, Feathering 102
Paddock, 143
Pads for Trusses 306
Paint Mill 198, 254
Paint Mill 198, 254
Palate for Artificial Teeth 14
Paper, Polishing 62
Paper Making Machine 110 [2]
Paper Stock, Washing 166
Paper, Strip, Manufacturing of 182, 886
Paper from Bark 98
Paper Keeper for Printing Presses 6, 142, 198, 244, 270, 346, 270
Paper Box Machine 222
Paper Ruling Machine 202
Paper Bag and Envelope Machine 278
Paper for Wraps, Machine for 94
Paper and Box 306
Pavements, Cast Iron 142 [2], 262
Pegging Machine 306
Pendulum for Time Pieces 150
Penmanship, Teaching 190
Pen Fountain 166, 262
Pen Holder 62, 254, 262
Pen and Pencil Case 38 [2], 54, 62 [2]
Pencils for Drawing 94
Pencil Sharpener 262
Pianoforte Stools 38
Pianoortes 142, 174, 182, 252, 270, 330
Pianoforte Frames 206
Pie Driving and Atmospheric 142
Pill Making Machine 306
Pin, Sewing 38
Pin Sticking Machine 306
Pipes, Water 54
Pitchers, Molasses 336
Plane Stocks, Hanging 6
Plane Stock, Hanging 278
Planes, Shoemakers 54
Planing Machine 102, 206, 294
Planing Machine, Cutter Heads for 33
Planing Machine, Presser Bar for 94
Planing Machine, Feeding Planks to 378
Planing Machine, Hanging the Knife in 142
Planing and Matching Machine 150
Planing Metal, Machine for 270
Plank Loods for buildings 322
Platform, Folding 402
Plows 62, 86, 158, 174 [2], 190 [3], 246 [2], 278, 286, 346, 342
Plows, Steel Mold Board for 354
Plugs for Lubricating Axes 155
Polishing Machine 38, 222
Polypus 118 [2]
Porfolios 314
Posts, Fence 278
Potato Peeling 378
Potash and Soda 370
Powder Flasks 70
Presses, Printing 38, 143 [2], 230 [2], 322, 370, 394
Presses, Hay and Cotton 102, 246, 394
Presses, Cotton 322, 346, 363
Preparing Liquids for Aiding Digestion 284
Printing Blocks 86
Printing from Engraved Plates 150
Prismatic Foams, Turning 126
Propellers 150, 206, 262, 286, 306, 322, 370
Propeller, Self-acting 344
Projects, Molds for 153
Projectiles, Press for making 230
Projectiles 278 [2], 402
Pulleys, Attaching to Shafts 6
Pulleys, Bearings for 62
Pumps 14, 22, 48, 110, 126, 150, 174 [2], 178, 206 [2], 214, 230 [2], 238 [2], 246 [3], 278, 302
Pumps, Piston for 14, 215, 370
Pumps Operating by Wind 222
Pump Air Chamber of 230
Pump, Elastic Tube for 232
Pump, Double Acting 314
Pump, Ship 354
Pump, Water for 354
Pump, Operating Valves of 362
Pump, Working 332
Punching Machine, Metal 262 [2]
Purchase, Suspended 142
Quartz Crusher 110, 299

R
Rails, Rolling R. R. 286
Rakes 142, 190, 262
Rakes and Elevators 230, 246
Railway Chairs 370
Rams, Hydraulic 22, 110
Rattan Machine 118, 142, 378
Refrigerators 150, 370
Rolling Jewellers Scraps 238
Regulating Furnaces of Hot Water Apparatus 110, 118
Regulators for Steam Engines 118, 314
Rifling Machine 166
Rigging Machinery for Worming 6
Riveting Machine 6
Rivet Machine 346
Roads, Repairing 182
Rods and Tubes, Metal 102
Roller Catch in Self-Acting Mule 62
Rollers, for Pattern Chains for Looms 66
Rollers for Corrugating Sheet Metal 166
Rope and Drier for Paper Making 206
Rope and Cordage Machine 46, 70, 102, 354, 370
Roving Regulating the size of 142
Rubber Compounds, Re-working 160
S
Saddle Trees 262, 298, 354
Sails 62, 238, 294
Sail, Manufacture of 46
Salines, Process of Treating 118
Sand Paper Cutting Machine 346
Sand Washer 346
Sash Fastener 126, 222, 252, 294, 412
Sash Supporter 278, 286
Sash Clamping Machine 278
Sashes, Window 266, 322, 338, 394
Saucepan 94
Saws, Circular 142, 158 [2], 162, 174, 322, 370, 378, 394
Sawing Firewood 22, 278
Sawing Piles under water 70, 278
Sawing Wedges or Shingles 262
Sawing a Log by its own weight 236
Sawing and Planing Clapboards 294
Scaffolds 142, 330
Scales 30, 135, 354, 370, 412
Screw for Boots and Shoes 246
Screw Blank, Threading 94
Screw Jacks 206
Screw Fastening 346
Screw Fastening 94, 322, 412
Seats for Public Buildings 102, 110
Seats for Wagons 70
Seed Planters 6 [2], 62, 91 [2], 118 [3], 142, 158 [3], 166, 174 [2], 182, 206 [2], 222, 230 [3], 238 [2], 246 [2], 254, 256, 298 [3], 306 [3], 314 [2], 370, 336
Seed Drill 330
Seeding Machine 333, 378
Separators, Gold 24, 230
Separators, Grain 33, 62
Separators, Metal 126
Separators, Flour and Bran 222
Sewing Machines 14, 35, 78, 86, 94, 102, 110, 112, 126, 142, 158 [2], 162, 174 [2], 182, 190, 198, 230 [2], 262, 278, 294 [2], 298 [3], 306 [3], 322 [2], 346 [3], 354, 362, 378 [2]
Sewing Machine Cases 412
Sewing Shop 306
Shafts, Arranging at an angle 278
Shafts, Friction Iron 371
Shears, Tailors 14
Sheep Shearing Machine 270
Sheet Metal Folding Machine 322
Ships, Construction of 46
Ships, Standing Lifting of 190
Shifting Bits 246
Ships Ventilator for 314
Ships Spars 354
Ships Iron 362
Shingle Machine 22, 46 [2], 70, 86, 94, 126, 142, 150, 234, 256, 346, 402
Shovel Handle Machine 78, 330
Shoe for Grain Mills 306
Shuttle for Looms 278 [2], 371
Shutters, Metallic Slat 14
Shutters, Rolling Iron 133, 294, 412
Sifting Apparatus 394
Sifting and Bolting Machine 62
Signals R. R. 354, 386
Signs, Advertising 286
Silvering Looking-glasses 256
Skates 198 [2]
Skiving Boot and Shoe Counters 214
Slag Ware, Making 22
Slate Frame 78
Slate Machine 142
Slate, Grinding 270
Sleigh 222, 294
Slivers, Cutting Wood into 198
Smut Machines 44, 54, 62, 86, 182, 286
Soap Making 112
Soap Cutting Machine 378 [2]
Socket Handles for Tools 350
Soda Water Apparatus 214 [2], 322
Spark Arrestors 70, 158, 286, 294, 298, 354
Spade Plows 206
Spikes 293
Spinning Frames 94, 314
Spinning Machine 294
Spinner, Catch Fish 322
Spinal Wheel for Replacing Cars on the track 254
Spirit Levels 190
Splice Piece for Railways 254
Spoke Machine 14, 206, 337
Spoons 347
Spring, Metallic 198, 294
Springs, India Rubber 222
Springs, Carriage 270, 294
Springs for Hinges 330
Springs, Pneumatic 344
Springs, Rollers for Curtains 278, 294 [2]
Spurs 174
Square, Scale, Level and Bevel 62
Staff Screw for Ship Carpenters 174
Staging, Portable 222
Stages, Portable
Stalk Cutter 412
Stalk Gatherer 394
Stalls for Horses 370
Stamp, Hand 296, 370, 402, 412
Starch Apparatus 236, 371
Statue, Equestrian 294
Staves, Bolts for 78
Stays Machine 150, 298, 322 [3], 354
Stays for Presses 154
Steam Machine 158
Steam, Regulating Discharge of 278
Steering Apparatus 110, 153, 214
Stereoscopic Case 203
Stereoscopic Medallion 153
Sterilizing Apparatus 142
Stills, Rosin 294
Stirrup Gears 354
Stone Dressing Machine 78, 78, 371
Stone Drilling Machine 78
Stone Polishing 78, 270
Stone Carving Machine 83
Stone Pasteboard 222
Stone, Machine for Raising 254
Stone Sawing Machine 330
Stone, Artificial 330
Stopper of Bottles 78, 150, 222
Stock, Lock 150, 402
Stop Water for Ships 354

T
Tables 6, 230
Table Leaves, Supporting 238
Table and Desk combined 270
Tacks, Lifting 298
Tanks for Supplying Locomotives 102
Tannin, Composition for 126, 394
Tannin Processes 142, 386 [2]
Teapots, Casting Spouts of 118
Teeth 142
Telegraphic Keys 22, 298
Telegraphic Apparatus 386
Tensile Paper Cutting Machine 346
Tenoning, Foot 294
Threshers and Cleaners of Grain 190
Thread Dressing 294
Thread, Twisting 362
Throshles for Spinning Cotton 118
Tools, Registering 278
Tidal Alarm Apparatus 338
Tile Machine 362
Time Keepers 402
Tires, Securing to Wheels 386
Tobacco, Substitute for 198
Tobacco, Pressing in Plugs 322
Tool for Grooving Moldings 298 [2]
Tooth Clothing for Picking Cylinders 70
Tongue Iron 336
Tonguing and Grooving Machine 142
Tops for Carriages 232
Topsails, Reefing 6, 110, 306
Towel or Clothes Horse 102
Trap, Mole 14
Trap for Animals 78, 142, 412
Trap, Tape Worm 86 [2]
Trap, Rat 293
Trees, Saving 296, 362
Treenail Machine 298, 362
Truck, Hand 150
Truck, Locomotive 182
Trusses 14, 166, 394
Trussing Yards to Vessels' Masts 113
Tubes, Roving 54
Tubes, Metal 160, 362
Turning the Leaves of Books 14, 262
Turning, Boring and Slotting Machine 222
Turpentine, Distilling 286
Type Casting 86

U
Umbrellas 298
Uterine Supporters 305
V
Valves, Steam Engine 78, 190, 222, 230, 238, 246, 294,