

How's Ouries

J. B. C., of Ohio.—On page 169, Vol. VI. SCIENTIFIC AMERICAN, you will find an instructive article on the subject of India-rubber rollers for washing machines.

W., of Lowell.—We do not think your improvement in torpedoes patentable. A similar water-proof joint has been applied to other uses, and its application to a torpedo would be a mere double use.

Maple Sirup.—A. D. Smith, of Danby, Vt., is the manufacturer of a most excellent quality of maple sirup. We speak from experience.

S. F., of Pa.—The 15-inch smooth-bore guns to which you refer are for the navy; the 12-inch rifled guns are for forts, one 12-inch rifled gun has been made already at the Fort Pitt works.

A. L., of Mass.—The chloride of lime is bleaching powder, and consists of dry lime in powder saturated with chlorine gas. It will not do to use it for whitewashing the walls of rooms.

C. R. B., of Kansas.—You will find that it takes but little, if any, more fuel to keep your boiler 15 lbs. above the working pressure in your cylinder.

J. A., of Ill.—India rubber is not soluble in alcohol, but neither it nor gutta percha makes good vessels for containing alcoholic spirits.

R. S. L., of Ohio. The quantity of water, in pounds, falling in one minute, multiplied into the perpendicular height of your fall, and divided by 33,000, will give you its horse power, from which it is common to deduct one-third for friction leakage, &c.

J. H. F., of Kansas.—If you wish to keep steam up in your boiler at a working pressure all night, to start your engine in the morning without kindling a fire, of course you must expect your boiler to wear out somewhat faster than otherwise.

J. R. B., of N. J.—Dry lam or charcoal dust is superior to lime for spreading on the floor of a hen house. Old india-rubber shoes may be patched by the use of warm india-rubber cement, and patches of old rubber laid on and pressed down with a flat iron.

SPECIAL NOTICE—FOREIGN PATENT.—The population of Great Britain, is 30,000,000; of France, 35,000,000; Belgium, 5,000,000, Austria, 40,000,000; Prussia, 20,000,000; and Russia, 60,000,000. Patents may be secured by American citizens in all of these countries.

Money Received

At the Scientific American Office on account of Patent Office business, during one week preceding Wednesday, June 18, 1862:—

J. C., Jr., of N. Y., \$10; S. W., of Mass., \$25; J. H. & E. H. A., of Md., \$15; P. A. S., of N. Y., \$40; T. D. L., of N. H., \$15; J. McK., of England, \$15; J. E., of N. Y., \$75; J. W. S., of N. Y., \$15; H. S. & H., of Iowa, \$15; U. H. S., of Ill., \$25; T. & R., of Ind., \$20; J. P. D., of Ind., \$15; W. V. K., of Pa., \$12; L. H., of Me., \$15; A. H. E., of N. Y., \$25; W. J., of Minn., \$15; A. & M., of Wis., \$40; G. D., of

Mass., \$25; W. E. S., of Wis., \$25; W. S., of N. Y., \$15; A. I., of Pa., \$25; N. B. P., of N. Y., \$45; A. Q., of N. Y., \$15; J. P. H., of N. Y., \$15; J. M. H., of Pa., \$20; R. J. M., of N. Y., \$15; H. H., of N. Y., \$30; D. L. B., of N. Y., \$15; F. G. S., of Mass., \$25; E. T., of Pa., \$25; W. B. S., of Mass., \$15; A. J. S., of Cal., \$15; W. S. M., of Md., \$25; J. C., of Mass., \$25; J. O. L., of N. Y., \$15; J. G., of N. Y., \$15; G. H., of N. Y., \$15; H. J. H., of Ill., \$30; B. R., of N. Y., \$20; J. M. B., of N. J., \$15; J. D. L., of N. Y., \$40; F. W., of N. H., \$15; C. K., of Iowa, \$15; R. H. C., of N. Y., \$15; S. H., of N. H., \$15; J. & T., of Wis., \$25; A. S. L., of N. Y., \$40; A. M., of N. Y., \$43; A. C., of N. Y., \$10; W. B., of L. I., \$33; J. S. W., of Va., \$20; L. H., of N. Y., \$20; W. R., of Mich., \$45; L. D. R., of N. Y., \$43; G. R. B., of Ill., \$20; J. M. W., of Iowa, \$20; A. C., of Cal., \$10; W. & F. K., of N. J., \$20; G. N., of Conn., \$20; B. D., of Conn., \$20; J. M., of Pa., \$20; J. W. K., of Mich., \$20; A. L. W., of Mass., \$45; H. W. O., of Conn., \$20; H. G., of N. Y., \$45; G. H., of N. Y., \$20; F. C. L., of N. Y., \$20; H. C. I., of Me., \$20; G. S., of N. Y., \$20; B. T. B., of N. Y., \$40; A. G., of N. Y., \$45; D. C., of N. Y., \$12; W. H. C., of N. Y., \$25; L. S. R., of N. Y., \$25; G. P. P., of Conn., \$12; J. B. W., of N. J., \$15; J. W. P., of N. Y., \$25.

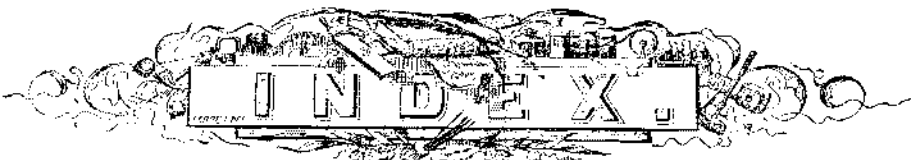
Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from June 11 to Wednesday, June 18, 1862:—

A. M., of N. Y.; W. B., of N. Y.; W. H. S., of Ill.; J. M. P., of N. Y.; C. W. B., of Mass.; S. W., of Mass.; H. B. B., of Mass.; C. S. I., of Ind.; J. B. W., of N. J.; G. P. P., of Conn.; L. S. R., of N. Y.; T. & R., of Ind.; W. W. K., of Pa.; J. B. Z., of Nebraska; J. C., of Mass.; F. G. S., of Mass.; E. T., of Pa.; W. S. M., of Md.; W. E. S., of Wis.; G. D., of Mass.; C. F. B., of R. I.; W. H. C., of N. Y.; D. & R., of Iowa; D. C., of N. Y.; E. G. H., of Mass.; H. H., of N. Y.; J. & T., of Wis.

TO OUR READERS.

RECEIPTS.—When money is paid at the office for subscriptions, 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 our reception of their funds.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired.



ILLUSTRATIONS.

Ammunition box for army officers (Hirschbuhl) 272
Annunciator, telegraphic hotel (Bennett) 97
Armor plates to war vessels, mode of fastening (Lowe) 176
Army chair, folding (Hardy) 400
Balance, compensating spring (Squier) 8
Beehive, patent (McGonnigle) 240
Blasting and splitting stumps with percussion cartridges (Norton) 212
Block, ship (Hussey) 304
Boiler and steam generator, combined (Prindle) 56
Book patterns (Forrest and Wheeler) 33
Bread and pastry board and flour chest combined (McNamee) 72
Breech-loading cannon (La Boyteaux and Dangerfield) 112
Breech-loading gun (Berg) 344
Breech-loading rifles (Spencer) 49
Broom, home-made corn (Kaufman) 32
Burner, gas (Monier) 200
Burner, star (Pratt & Rosserans) 32
Candle molds (Ryder & Leonard) 129
Candlestick, camp (Marsden & Burrell) 4
Cannon, mode of making (Yeake) 225
Cannon, mode of mounting (Hopkins) 116
Cartridge (Richard) 55
Cartridge, Fombyberry) 277
Carbureting apparatus (Bassett) 280
Carbureting apparatus for street lamps (Shepherd) 181
Casting bronze ordnance or other articles (Revere) 256
Chair, rattan suspension (Leonard) 337
Chairs, improved railroad (Hall) 350
Chimneys, mode of securing lamp (Jacobs) 402
Clothes bar, portable (Willard) 152
Clothes dryer (McNell) 288
Compass, army and travelers' (Hunter) 360
Coupling, automatic car (Birch & Nott) 224
Cranks (Seymour) 283
Cut-off, variable (Walbridge) 162
Detector, low-water (Blake) 113
Ditching and tile-laying machine (Foster & Chaffee) 136
Drains, form of cement (Watson) 53
Drawbridge for canals, &c., self-acting (Schneider & Montgomery) 150
Eriasson, Captain John (Portrait of) 209
Evaporator (Tufts) 264
Exhaust, variable (Lathrop & Co.) 200
Fagoting rails (Perry & Onion) 264
Fire alarm (Cooper) 302
Flywheels, mode of hanging, (Bryant) 114
Fractured limbs, relief for (Yerger) 148
Galva, iron-plated steamer (Corning, Winslow & Co.) 244
Grain separator (Higley) 104
Grate, vibrating (Brown) 570
Grindstones and turning them true, rotary machine for sharpening (Schuyler) 376
Gun, self-loading (Brady & Noble) 82
Guns, submarine (Page) 320

Hammer roller for making iron plates (Beach) 370
Harvesters, sickle bar for (Smith) 368
Harvesters, self-raker for (Russell) 312
Hat and cap, army (Warburton) 200
Hay rack (Strive) 256
Hooks, safety (Beagle) 216
Horse rake (Mellinger) 401
Knife sharpener and scourer (Buckman) 88
Knife, budding (Gird) 160
Knife, fork and spoon for the army (Neill) 232
Lamp attachment for carriages (Scheeper) 16
Lamp burner, patent excelsior (Newman) 132
Lamp, patent kerosene (Mayhew) 112
Lamp, coal oil (Tritton) 120
Lath, engine (Walbridge) 216
Lath for turning irregular forms (Blanchard) 45
Lathes, centering chucks for (Keage) 1
Lock for the nuts of railroad bolts (Lawrance & White) 80
Merriman, the early prototype of the (Gregg) 352
Minion, iron-plated rebel steamer, 192
Metallic packing for engine pistons (Horton) 184
Momentary cylinder brake (Ambler) 385
Motor, steam battery (Eriasson) 177
Nutcracker, spring (Clark) 37
Nutcracker, patent (Smith) 136
Ordnance and gunnery (Van Nostrand) 303
Oyster dredge (Force) 37
Paddle wheels, feathering (Kepner) 344
Pitch square (Iseman) 403
Planting machine (Whitelsey) 193
Planter, hand-corn (Shores) 272
Press, toggle-joint (Watson) 259
Projectile (Ribbon) 384
Propeller, light-draft (O'Hara) 340
Protector and reflector for glass-lamp chimneys (Colburn) 373
Pump, two-stream (Budd) 406
Pumps, piston packing for 64
Rake, horse (Buckman) 8
Refrigerator, revolving (Bellotti) 184
Rotary engine (Cox) 257
Saw mill (Walbridge) 305
Saws, segmental circular (Hawley) 4
Scraper, road (Brooks) 248
Screen for flour bolts (Lendis) 226
Screw machine (Browne & Sharpe) 321
Screw, combination map (Price) 53
Sewing machine improvements (Wheeler & Wilson) 1, 312
Sewing machines, order for (Brady) 69
Shingle and heading machine, combined (Trevor & Co.) 320
Silk-sorting machine (Atwood & Leigh) 65
Skate, spring (Goodyear & Sprague) 40
Sled, coasting (Brown) 296
Stamp for post offices, railroads, &c., band (Norton) 304
Stump, hand (Spencer) 296
Stave machine, patent (Sisson) 383

Steam boilers, safety guard for (Mann) 168
Steering engine, improvement in the (Gardner) 354
Steam engine, portable (Walbridge) 40
Tapping machine (Browne & Sharpe) 321
Telegraph, light (Colvin & Gardner) 323
Tent, army (Rankin) 80
Tent, army (Townsend) 203
Ventilating apparatus for ships, hospitals, dining-rooms, &c. (Peteler) 120
Ventilator for houses (Williams) 336
Washing machine and planer (Gill, Palmer & Webb) 196
Washing machine and wringer (Smith) 24
Wheel, turbine (Russell) 273
Wheel curb (Shepherd) 292
Wool-washing apparatus (Turner & Robinson) 17
Wheel, water (Van Dewater) 232
Wrench and sawset, patent (Rawson) 88

MISCELLANY.

Aceteline, artificial 312
Adamas—soapstone 402
Adamas, the new material 291
Advertisements 15, 31, 47, 63, 78, 94, 111, 127, 143, 159, 175, 196, 207, 223, 239, 255, 271, 287, 303, 319, 335, 351, 367, 381, 399
Agassiz, the life-work of 23
Agassiz in Brooklyn, Professor 105
Agassiz and Oken dining on potatoes 53
Agassiz as a lecturer 137
Agassiz to Dr. Bache, a tribute by Professor 355
Air, purifying 197
Alcohol, its uses 3
Albert, Prince 86
Albert, death of Prince 9
Albert, medical treatment of the late Prince 39
Air, sunshine and health 119
Alleghany bituminous coal field, &c. 405
Alloy, a new 296
Alloy, a new fusible 211
Amalgam applications 336
Amalgamating system, Piedmont gold mining and 298
American machines in England 52
American enterprise and British jealousy 315
American steamer for China—her steam engine 177
Aniline, to prepare 81
Aniline color, painting with 117
Aniline a powerful remedy for nervous diseases such as St. Vitus's dance 49
Animal substances, preserving 383
Animals have daily exercise, let 311
Anchor ice 166, 214, 262
Annealing steel and hardening dental instruments 42
Anthracite fire, management of 70
Ants, scientific 187
Apple orchard, plant an 379
Arms, plates manufacture of 281, 229\*
Armory, Northwestern 38
Arms, curious collection of 187
Arms, rifled small bore—Enfield's condemned 91
Army uniforms 7
Army and navy, jealousy between the 201
Art, a splendid work of 183
Artillery, powerful—iron forts and improvements in iron and steel 167

Artillery matches and signals 202
Artist, fortunes and misfortunes of an 87
Asteroid discovered, another 261
Astor library—resignation of the librarian 54
Atlantic cable again 401
Ball, the motion of a 312
Balls to the right, deviation of 293
Bank suspensions 27
Banquet in sewer, a 363
Barometer, the simple 70
Barometers, home-made 39
Barometers and hygrometers 150
Baskets, patent moss 313
Batteries, stationary and floating revolving, iron-clad 270
Battery, new marine 280
Beauregard and the SCIENTIFIC AMERICAN, General 394
Bees, the queen 107
Bees, wintering 30
Beet root, cultivation and sugar of 313
Belt on a quarter twist, to set a 358
Benzine in varnish making, dangers of 193
Benzine, dangerous character of 116
Benzole for making varnish, to purify 55
Bessemer process, secrets of the 297
Bessemer steel for guns 11
Bevels, rule for cutting 37
Billiards, how to play 132
Birds causing alarm, destruction of small 369
Blasting and splitting stumps with percussion cartridges 212
Blazing, improvements in 293
Bleaching, to stop 91
Blood globules 247
Boiler, an improved farmer's steam 56\*
Boilers, danger of some waters for steam 56
Boilers, priming in steam—its causes and remedies 107
Boilers in Rhode Island, inspection of steam 83
Boilers in cities, steam 43
Boilers, preventative of incrustation in 243
Bolt or projectile, concave 326
Bombshell, a new 39
Boots and shoes 217
Bottle law unconstitutional, the 58
Bottle premium, the 261
Bull and the spinal cord, the 59
Brakes in England, American railway 387
Brass, lacquering 224
Brass, manufacture of 247
Bricks, tubular 354
Bridge, Victoria 90
Brine in Michigan—strongest in the United States 243
British and the Armstrong gun, the 275
British iron-clad navy, the 297
British navy iron vessels, the 196
British iron-clad fleet, the 195
British newspapers on the capture of New Orleans 355
British Parliament on the fight in Hampton Roads 382
Bugs from vines, to keep 395
Bronze, tempering 167, 192
Bullets, experiments with steel-pointed 342
Bunsby again 394
Business in general 393
Business, the pleasures of 330
Butter, extraction of 195
Butter in winter 108
Butter, preserving 383
California lenses 29
California workmanship, a splendid specimen of—Hansbrow's pump 198

California, a kind word from 179
California, natural curiosities of 227
California statistics and progress 203
California, sheep in 266
California woolen manufactures—sewing machines—sugar grasses—grain cleaners 11
Cameo engravings 353
Camphor, uses of 116
Camphor on water, cause of the motion of 323
Canal dredging machines wanted 262
Canals in India, gigantic 363
Canals, steam on 400
Cannadoyle, launch of the 233
Candle manufacture—descriptions of the operations 263
Candles, manufacture of—important patent case 323
Candles, improvement in 137
Candles for illuminating purposes, colored 159
Canes, why do men carry 90
Cannon, efficiency of rifled 2
Cannon, weight of 206
Cannon, American steel 277
Cannon, Dr. Yeake's mode of making 325\*
Cannon, prevention of spiking 54
Cannon balls, the motion of 70
Cannon, a 1,000 pounder 282
Cannon balls, weight of 235
Cannon manufacture at Pittsburgh 163
Cannon, wrought-iron rifled 360
Cannon, strong—American built up guns 121
Carpets, manufacture of 379
Carpets, Oriental and French—French taste criticized 261
Carbonic oxide gas, poisonous effects of 357
Carbolic acid for wounds, &c. 148
Cartridge, Richard's improved 85
Cartridges, substitute for biting 310
Cartridges, their history 139
Cartridge manufacture, terrible explosion of a 235
Cartridges and shot, new 266
Cast-iron articles, tinning 280
Cast-iron, malleablizing 105
Carbureting process, the results of the 339
Cast-iron moldings 314
Cast-steel, newly made 267
Cement for the brass mountings of paraffine lamps 218
Cement for wood and glass 179
Cashmere shawls—their imitation 265
Cements for porcelain, marble, alabaster, glass, &c. 92
Central Park, conservatory in the 208
Cheese, varnishing 195
Chemical formulas, improvements in the 251
Chemical nomenclature 6
Chemical and physical modifications of the atmosphere consequent on habitation 231
Charcoal in medicine and as a disinfectant 91
Chemistry of iron 378
Chemistry to the military art, application of 84
Chimneys, Colburn's protector and reflector for glass 373\*
Chimneys, the construction of 64
Cement drains, forming 53\*
China, another steamer for 39
China, the new iron-clad steamer—American condensers 250
Chloroform, danger of 37
Chloroform, a new method of giving 134
Chloroform, a substitute for 37
Chloride of lime as an insecticide 82