

(22) Chemist asks if there is known any chemical or combination of chemicals which, if applied to the hair of the head, will turn it gray, without producing any injurious consequences. A. We know of nothing that we can recommend for this purpose.

(23) S. W. C. writes: In your paper for February 1, 1879, page 75, No. 14 of "Notes and Queries," you state that a strong aqueous solution of tannic acid will restore faded writing on parchment. Would that work on paper? A. Yes.

(24) W. M. asks what is the best varnish or paint for iron tanks, to protect them from rust. Would like to get something that will not scale off. Would paraffine applied to the iron hot, stick well and stand for a long period? A. Coat the dry tank with genuine asphaltum varnish, and when this has nearly dried, with melted paraffine. Let the varnish harden thoroughly before filling the tank.

(25) L. M. C. asks how to make a gold bath for plating, so that he will get a dark gold deposit, and how many Bunsen's elements are required. A. See "Electro gilding," p. 2540, SCIENTIFIC AMERICAN SUPPLEMENT, No. 160.

(26) J. B. asks what chemicals are used in fire extinguishers. A. Usually a strong aqueous solution of carbonate or bicarbonate of soda and strong sulphuric acid.

(27) W. H. G. S. writes: I have a large quantity of small malleable iron castings; I wish to copper them. How shall I do it? A. See SCIENTIFIC AMERICAN, vol. 39, p. 75 (23).

(28) J. P. asks: 1. Is there any way of making artificial stone without kiln drying; is there any treatise on the manufacture? A. Yes; consult patents 22,902, 82,731, 105,132, 100,944, 100,945, 101,253, 118,477, 119,394, 150,173, 157,511, and 155,176. See Maj. Gen. Q. A. Gillmore's "Practical Treatise on Colnet Beton and other Artificial Stones." 2. Have the postal department found a satisfactory canceller? A. We believe not.

(29) C. H. asks: What was the first steamship to cross the Atlantic? Was it the Savannah of New York in 1819 or a vessel from Liverpool in 1817? A. Savannah, 1819.

(30) F. H. B. asks how to make a glossy blue japan for tin. I tried white varnish added to blue dissolved in linseed oil and spirits turpentine, but the color was dingy and the mixture muddy. A. Grind bright Prussian blue or smalt with pale shellac or mastic varnish.

(31) H. L. asks: What wire gauge is referred to in giving the size of wire used on the dynamo-electric machine described in SCIENTIFIC AMERICAN SUPPLEMENT, No. 161? A. American.

(32) J. A. S. writes: 1. Give size and material (metals, etc.) of the Right telephone (dimensions of each part). A. The construction of the Right telephone is described on p. 186 of current volume of the SCIENTIFIC AMERICAN. The dimensions given in the engraving are correct. The diaphragm may be of wood or metal, or a membrane may be used. The spring may be of brass or steel. 2. Where are the connections made? A. One wire is connected with the spring, the other with the metal attached to the diaphragm.

(33) J. W. W. asks (1) how lead pipe is made. A. By forcing semi-melted lead by hydraulic pressure, through a die, in which, concentric with its walls, is supported a core. The process is analogous to that of tile making. 2. How is iron gas pipe made? A. By passing strips of iron heated to a welding heat between rolls having semicircular grooves. The pipe is formed and welded over a mandrel as it passes between the rolls.

(34) R. E. H. asks: Does the Gatling gun send all its shots to the same point, or do they scatter? A. It may operate either way. The gunner, by giving it a lateral motion, may scatter the bullets to almost any extent.

(35) J. H. F. asks by what process he can extract nicotine from tobacco. A. Tobacco leaves are digested for 24 hours, and repeatedly, with water containing sulphuric acid, pressed, and the liquid evaporated half down. It is then distilled with caustic potassa, and the nicotine exhausted from the distillate by ether. The ether is removed from the ethereal solution by evaporating, finally elevating the temperature to 140°C (=284° Fah.). The nicotine, which is still impure, of a brown color, is distilled slowly at 180° C (=356° Fah.) in a current of dry hydrogen over quicklime. Some varieties of tobacco yield as much as 7 per cent of nicotine, Havana only 2 per cent. Nicotine turns brown and is partially decomposed in contact with air.

(36) F. H. N. writes: You told in a late paper how to cut off water gauge glasses for steam boilers. I suggest a better plan. Take a small round file, insert it in the glass, and hold your thumb for a gauge as to the length you want to cut off, then scratch around and the thing is done.

(37) M. McL. asks (1) how gas is made, and of what material, at the Municipal Works, foot of 44th street. Is it made from water? My friend contends that it is made from water; I say that it is not possible even in this age of science. A. Yes; when superheated steam is passed slowly through a large body of ignited carbon (coal) it parts with its oxygen to the latter. The resulting gas—composed chiefly of hydrogen—and carbon monoxide—has very little illuminating power, but this is remedied by introducing a small quantity of the vapor of some rich hydrocarbon—as naphtha—into the retort with the gases. 2. Also what is meant by the governor room in a gas works. A. The governor is an appliance by which a uniform pressure is automatically maintained as the gas passes from the reservoirs or gas holders to the street mains. The room where the governor stands is called the governor room.

(38) D. C. asks: 1. What is the temperature of a vacuum? A. The temperature of bodies within a vacuum under ordinary circumstances varies with the temperature of surrounding bodies, the inclosing walls,

etc. 2. What is the recipe for making a brilliant black ink used in fine pen work? A. See answer No 15, p. 218, current volume SCIENTIFIC AMERICAN. 3. Which is the best steam engine governor in use? A. There are several governors that seem equally good. We are unwilling to decide between rival manufacturers.

(39) G. L. L. asks: 1. What can I use to coat the inside of a wooden box for holding silver plating solution? A. Line the vat with sheet lead, and give the latter several good coats of a melted mixture of equal parts of genuine asphaltum and gutta percha. 2. What kind of wood is the best to make the box of? A. Cypress is among the best. 3. Is the inclosed sample of rubber the kind that is used for making rubber hand stamps, and will I have to vulcanize it after taking it from the mould? If so what is the most simple process? A. Yes; see pp. 48 and 105 SCIENTIFIC AMERICAN, vol. 39.

(40) W. G. W. asks: 1. What will make hair grow, such as beard and moustache? A. Keep the system in a vigorous condition and the skin clean. Bathe the parts frequently with cold water containing a small quantity of tincture of cantharides. See "Hygiene of the Hair," by Professor Erasmus Wilson, SCIENTIFIC AMERICAN SUPPLEMENT, No. 110. 2. What will turn it black or dark, not instantly, but slowly? A. The diluted juice of the hulls of green walnuts (Paulus Ægineta) is commonly employed.

(41) C. H. H. writes: 1. Take two round balls of precisely the same size, one being, say, four times heavier than the other, and let them both drop at the same time. Will the heavy ball strike the earth any quicker than the light ball? A. In air the heavier body would reach the earth first. 2. In the SCIENTIFIC AMERICAN of February 15, in the article headed "Galileo's Museum" by H. D. Garrison, it is stated that all bodies large or small, dropped from an elevation at the same time, will reach the earth at the same time. Is this so? Please explain, as I think the atmospheric resistance would be greater in the large body than in the small. A. In a vacuum all bodies would fall with the same velocity; in air, the action is modified. 3. In query February 1, in answer to E. W. in directions for making a Leyden jar, he is told to coat an ordinary candy jar with shellac and then coat with tin foil inside and out. This I have tried by putting three or four layers of shellac on first, and then coated both inside and out smoothly with tin foil, and yet the jar will not work. Please give me the reason. A. Jars for this purpose should be of green glass. Flint glass is not a good insulator. You should also reject a jar which has the slightest crack or flaw.

(42) B. W. asks if an electrical plate machine and a battery of Leyden jars will work an electrical pen, as well as a Bunsen battery? Or tolerably well? A. No; the discharge of sparks is not sufficiently rapid.

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated:

W. M. S.—It is the pollen of the pine (Pinus strobus).

COMMUNICATIONS RECEIVED.

On Electric Light. By G. F. S. On Vibratory Motions. By J. C. W.

[OFFICIAL.]

INDEX OF INVENTIONS

FOR WHICH Letters Patent of the United States were Granted in the Week Ending March 11, 1879, AND EACH BEARING THAT DATE. [Those marked (r) are reissued patents.]

A complete copy of any patent in the annexed list, including both the specifications and drawings, will be furnished from this office for one dollar. In ordering, please state the number and date of the patent desired and remit to Munn & Co., 37 Park Row, New York city.

Abdominal appliances for movement cure, D. T. Gale..... 213,044 Advertising caster, J. H. Flynt..... 213,041 Alarm lock, T. N. Roberts..... 213,249 Artist's kit, W. H. Brownell..... 213,186 Axle and box, vehicle, O. Robbirds..... 213,071 Axle box, car, W. W. Worswick..... 213,082 Axle, vehicle, E. E. Lincoln..... 213,117 Balls, machine for making pall, L. Williams..... 213,081 Baker's cabinet, W. L. Allen..... 213,155 Ballot box, J. Powell..... 213,133 Barrel chock, G. S. Jewell..... 213,208 Batting, package of cotton, G. M. Hamlin..... 213,046 Beads, stringing, S. M. & J. C. Lewis..... 213,215 Bed bottom, A. C. Langworthy..... 213,115 Bee hive, J. J. Lawson..... 213,212 Beer pressure regulator, M. Tschirgl..... 213,148 Bell, gong, J. S. Crane..... 213,176 Bird seed reservoir, O. W. Taft..... 213,145 Blue, manufacture of Prussian, L. Graf..... 213,189 Boat lowerer and detacher, W. A. Brice..... 213,165 Boot and shoe, L. Loesser..... 213,217 Boot and shoe heel stiffeners, machine for crimping, M. H. Hall..... 213,191 Boot upper, S. A. Robinson..... 213,260 Boot and shoe manufacture, W. R. Miller..... 213,231 Bow and arrow, Wright & Thorne..... 213,083 Box catch, A. Gaertner..... 213,102 Bracket, O. A. Bingham..... 213,084 Bread box, W. G. Jones..... 213,206 Brick, etc., kiln for burning, N. Lodge..... 213,216 Brick machine, J. C. Anderson..... 213,085 Bridge construction, E. Williams..... 213,154 Bridle bit for horses, G. D. Dudley..... 213,099 Buckle, harness, J. P. Halsey..... 213,200 Buckle, trace, H. Persels..... 213,083 Buffer spring, W. M. Betts..... 213,082 Calculator, tax, R. L. Mudd..... 213,234 Candlestick, J. Frick..... 213,194 Car brake, E. D. Chatterton..... 213,171 Car brake, A. Weymouth..... 213,153 Car coupling, M. R. Perkins..... 213,192 Car coupling, J. C. McCollum..... 213,055 Car, railway hand, G. S. Sheffield..... 213,254

Car wheel, S. L. Wiegand..... 213,270 Carriage bolt clamp or fastener, A. G. Snell..... 213,256 Carriage bow rest, J. E. Reeves..... 213,248 Casting mould boards, W. J. Adams..... 213,027 Catafalque, E. H. Parker..... 213,130 Churn, S. O. R. Harris..... 213,195 Churn, A. Muller..... 213,127 Circuit closer lock, C. H. Pond..... 213,084 Clothes horse, H. S. Thompson..... 213,078 Coat and hat hook, E. E. Stow..... 213,263 Cock, gauge, T. R. Bingham..... 213,083 Collar cap press, G. Chamberlin..... 213,170 Colter, wheel, J. Lane..... 213,049 Colter, wheel, T. Pates..... 213,061 Corn sheller, S. M. Massie..... 213,120 Cornet, C. H. Carson..... 213,094 Cribbage box, M. Greenspecht..... 213,045 Curtain fixture, R. D. Whitaker..... 213,369 Dental drill, C. Poor (r)..... 8,624 Dental engine hand piece, B. S. Brown..... 213,167 Dental plunger, H. Richmann..... 213,184 Domestic boiler, S. W. Bradley..... 213,036 Door bolt, Fairchild & Haseltine..... 213,182 Door spring, T. W. Hill..... 213,190 Draught attachment for vehicles, G. A. Hall..... 213,190 Dust pan, W. W. & F. B. Mix..... 213,232 Electro-magnetic engine, C. T. Mason..... 213,220 Elliptic spring, H. C. Luders..... 213,218 Elliptic springs, car blanks for, W. Evans (r)..... 8,612 Fan, automatic, T. J. Bottoms..... 213,164 Fan, automatic, J. Watts..... 213,206 Feather renovator, T. F. McBride..... 213,223 Fence bars from wire, cutting, J. Neimeyer..... 213,237 Fence post, iron, B. Metzler..... 213,064 Fertilizer distributor feed cup, Marks & Jessup..... 213,063 File case or box, S. Duryee..... 213,040 Filtering semi-fluids under pressure, apparatus for, Needham and J. & J. Kite, 2d..... 213,236 Firearm, revolving, P. Mauser..... 213,221 Fire extinguisher, E. C. Letters..... 213,116 Flour and meal chest with sifter, H. S. G. & H. B. Ray..... 213,069 Flour commode, J. Johnson..... 213,205 Flour mill dust collector, C. C. Washburn..... 213,151 Fruit drier, Moore & Bruner..... 213,233 Fruit gatherer, G. G. B. Greenwood..... 213,105 Furnaces, apparatus for supplying fuel to boiler and other, J. Proctor..... 213,067 Game apparatus, C. G. Knight..... 213,209 Game indicator, Jones & Osgood..... 213,113 Gate, F. P. Gladfield..... 213,187 Gate, Maddox & Humphries..... 213,119 Grain and middlings separator, W. H. Rhodes..... 213,070 Grain separator, J. Allonas..... 213,156 Grate, G. B. Marshon..... 213,228 Grater, nutmeg, W. Nash..... 213,059 Grinding mill, J. W. & S. J. Woodcock..... 213,273 Grinding mill burr, M. F. Connett..... 213,175 Harness, C. S. Piersons..... 213,246 Harvester, C. P. Gronberg..... 213,105 Harvester pitman connection, W. B. Dunning..... 213,083 Hats of straw, palm leaf, etc., C. M. Osgood..... 213,240 Heat and ventilation, producing, M. A. Shepard..... 213,188 Hitching bar, A. L. Andrews..... 213,084 Hop press, J. E. McCabe..... 213,123 Horse bit, J. Stanley..... 213,258 Horse hampering pad, W. E. Washburn..... 213,265 Hose coupling, A. Work..... 213,274 Hydraulic elevator, S. Swarts..... 213,143 Hydro-motor, E. Fletscher..... 213,101 Ice makers, cell for tanks of, F. N. Mackay..... 213,219 Insect trap, W. J. Quinn..... 213,083 Insect destroyer, L. C. Root..... 213,215 Insect destroyer, O. Mueller..... 213,235 Iron and steel by magnetism, ascertaining the density and tensile strength of, A. Herring..... 213,197 Knockdown chair, W. W. Hopkins..... 213,111 Lamp, D. Lubin..... 213,062 Lamp, Stineman & Flack..... 213,141 Leather buffing roll, W. Place..... 213,247 Leather piping, Z. M. Lane..... 213,211 Lever, device for placing the working of more than one engine or mechanism under the control of a single, H. Wadsworth..... 213,079 Life preserver, F. G. C. Weir..... 213,152 Lock, J. Sargent..... 213,252 Locomotive and dummy engine, E. D. McCracken..... 213,224 Loom shedding mechanism, O. W. Kenison..... 213,208 Loom shuttle, C. I. Kane..... 213,201 Loom shuttle, metallic, Beatty & Edwards..... 213,087 Loom shuttle motion, A. Faulkner..... 213,183 Lubricator, E. F. Gordon..... 213,104 Malt liquors, preventing galvanic action in the manufacture of, Strater, Jr., & Rueter..... 213,142 Mash from whole kernels, process and apparatus for preparing maize, C. A. O. & G. A. P. Bohm..... 213,092 Match safe, E. H. Whitney (r)..... 8,621 Measure and funnel, liquid, C. V. Pettibone..... 213,244 Measuring tank, liquid, W. Baldwin..... 213,161 Metals, paper, etc., for protecting, S. C. Eaton..... 213,100 Moulder's tool, G. Sheed..... 213,073 Musical instrument, O. H. Arno..... 213,160 Nail driver, R. M. Bidelman..... 213,162 Nozzle for hardening dies, J. B. Harmsford..... 213,194 Nursery chair, W. E. Harrison..... 213,108 Organ blow pedal, J. H. White..... 213,268 Overalls, II. F. Woodward (r)..... 8,617 Pan former, T. R. Morgan, Br..... 213,126 Paper bag machine, triangular, Nugent & Burns..... 213,080 Paper cutter, A. Beck..... 213,089 Paper, expandable and contractible core for rolls of, J. P. Vienot..... 213,262 Pea sheller, J. Budd..... 213,161 Picture frame attachment, H. A. Pealee..... 213,188 Picture support, V. Vizet..... 213,263 Pipe coupling, A. S. Brownell..... 213,037 Planer, road, J. P. Lafetra..... 213,210 Planer and matcher, W. H. Doane..... 213,180 Planter, convertible corn, A. Runstetler (r)..... 8,614 Planter, corn, J. M. Brownwell..... 213,088 Planter, corn, S. Page..... 213,241 Planter, seed, W. J. Mercer..... 213,227 Planter, seed, J. H. Morgan..... 213,057 Planter, seed, J. Preston et al..... 213,086 Plate holder, V. Vizet..... 213,264 Plow, A. Goodyear..... 213,188 Plow, G. D. Loomis..... 213,051 Plow, G. W. McDaniel..... 213,225 Plow, A. W. Tucker..... 213,149 Plow attachment, wheel, J. R. Cummins..... 213,179 Plow, hill side, W. E. Connelly..... 213,085 Plow, rotary gang, N. Palmer..... 213,242 Printing machine, cylinder, H. B. Denny..... 213,093 Pulley for traveling cables, supporting, O. H. Jadwin (r)..... 8,619 Pulverizer, ground, E. D. Fink..... 213,185 Pump base, vacuum, G. Payne..... 213,248 Pumping fluids, gases, etc., compound valve for, L. O. Gassett..... 213,186 Railway frog, E. H. Johnston..... 213,204 Railway rail, M. R. Perkins..... 213,192 Railways, destroying vegetation on, L. B. Simpson..... 213,255 Raising heavy bodies, T. C. Naramore..... 213,128

Rocking chair, W. H. Haman..... 213,192 Roofs, construction of, J. Boyd..... 2,3,085 Roving machine flers, G. J. Hazard..... 213,196 Rowlock, I. H. Wright..... 213,135 Rubber roller for clothes wringers and other purposes, vulcanized, G. H. Hood..... 213,110 Ruling machine, paper, J. C. Furman..... 213,042 Saw, cotton gin, J. E. Carver..... 213,169 Saw sharpener, gin, P. Armstrong..... 213,158 Sawing machine, band, C. H. Mayo..... 213,222 Scales, weighing, F. D. Payn..... 213,082 Scoop and sifter, flour, J. B. Hughes..... 213,047 Seed drill, S. W. Bard..... 213,088 Seed dropper, J. M. Forde (r)..... 8,619 Seed treater, W. B. Fisher (r)..... 8,615 Service box and valve for closet cisterna, E. W. Meyer..... 213,280 Sewing machine, G. S. Darling..... 213,038 Sewing machine, J. N. Tarbox..... 213,146 Sewing machine, L. Dustin..... 213,181 Sheet metal box, D. M. Somers..... 213,074 Sheet metal pipes, grooving, C. Letterman..... 213,214 Shingle cutter, W. Goldie..... 213,163 Shipping case, H. S. Sprague..... 213,140 Shutter bower and fastener, T. B. Rogers, Jr. (r)..... 8,616 Sink trap, J. T. Bladen..... 213,168 Slate frame, H. L. Andrews..... 213,228 Spark arrester, J. L. Jacobs..... 213,112 Speculum suppositor, D. T. Gale..... 213,043 Spokchave, C. Spring..... 213,297 Stamping mill stem guide, Crane & Raup..... 223,177 Steam engine regulating device, C. C. Jenkins..... 213,202 Steam engine, rotary, J. H. Darragh..... 213,086 Still, oil, C. Alford..... 213,157 Stocking supporter, A. B. Shaw (r)..... 8,622 Stone, artificial, H. Bacon..... 213,087 Stone, artificial, T. P. Hall..... 213,107 Stool, camp, S. N. Stewart..... 213,259 Stove, steam cooking, J. Ashcroft..... 213,229 Stoves, laundry attachment for, B. Swift..... 213,144 Straw cutter, T. B. Shaw..... 213,258 Stuffing box for valves, etc., J. O'Meara..... 213,239 Sugar liquoring apparatus, E. Langen (r)..... 8,620 Swing, O. Unzicker..... 213,150 Syringe, agricultural, P. C. Lewis..... 213,060 Tables, fly fan for, J. E. Hanger..... 213,193 Tapper for barrels, etc., J. H. Armstrong..... 213,159 Tassel, muff, M. Silberstein..... 213,189 Telegraph, automatic fire alarm, J. H. Guest (r)..... 8,618 Telegraph instrument, fire alarm, C. H. Pond..... 213,065 Telephone, electric speaking, A. G. Bell..... 213,000 Thill coupling, J. McDermott..... 213,228 Thimble and bread cutter, A. McIntosh..... 213,124 Tinware vessel, W. G. Moore..... 213,056 Tobacco dresser, C. R. Messinger..... 213,229 Towing canal boats, H. Stevenson..... 213,076 Truss, Wilkins & McLean..... 213,271 Truss pad, N. Jones (r)..... 8,623 Twine holder, G. H. Stedman..... 213,075 Valve, balance puppet, L. D. Bartlett..... 213,080 Valve gear, G. E. Tower..... 213,261 Valve, vacuum, N. C. Locke..... 213,118 Vapor burner, Z. Davis..... 213,097 Vapor burner, J. S. Kellogg..... 213,114 Vault, burial, S. G. Maus..... 213,121 Vegetable cutter, T. Tachanun..... 213,147 Vehicle spring, S. B. Clear..... 213,172 Vehicle top prop, C. F. Odell..... 213,129 Velocipede, Hinckley & Culver..... 213,109 Ventilating and sewer connection for houses, W. Pickhardt..... 213,245 Vessels, constructing hulls of, T. Lee..... 213,215 Vise, B. W. Storey..... 213,077 Wagon reaches, rub iron for, A. B. Webster..... 213,267 Washing machine, T. S. Anway..... 213,086 Watch, stop, U. A. Juvet..... 213,048 Watchman's detector, G. H. Roth, 213,072, 213,135, 213,136 Water elevator, A. W. Coates..... 213,173 Water gauge and alarm, O. Collier..... 213,174 Water to tanks, machinery for regulating the supply of, K. & D. L. Murchison..... 213,059 Water wheel, turbine, J. T. Wilder..... 213,080 Whiffletree, T. S. Hill..... 213,198 Whiffletree hook, G. W. Jackman..... 213,201 Whip socket, O. B. North..... 213,238 Whip socket, E. W. Scott..... 213,157 Whistle, steam, F. A. Wood..... 213,272 Window screen, W. H. Betts..... 213,091 Wood, bending thin sheets of, T. B. De Forest..... 213,179 Wrench for inserting bung bushes, D. Ackermann 213,026

TRADE MARKS.

Bitters, Hart & Myers..... 7,100 Boots and shoes, A. Meyer & Co..... 7,086 Certain medicinal preparation, Billings, Clapp & Co. 7,101 Coal, Akron Iron Company..... 7,080 Cologne water, G. W. Williams & Co..... 7,091 Corn flour, Glen Cove Starch Manufacturing Company..... 7,108, 7,104, 7,105 Edge tools, Collins Company..... 7,084 Guano, phosphate, or other fertilizing compositions, R. W. L. Raas & Co..... 7,087 Horseshoe nails, Anvil Nail Company..... 7,099 Illuminating oils, H. B. Riggs..... 7,088, 7,089 Laundry bluing, L. H. Thomas..... 7,086 Lanterns, Buckeye Lantern Company..... 7,087 Lubricating oils, J. P. Weeks & Co..... 7,086 Lubricating compounds, Dean, Gracey & Co..... 7,106 Medicinal preparation, P. Davis et al..... 7,082 Medicated fruit, E. Grillon..... 7,107 Needles, Liebenroth, Von Auw & Co..... 7,098 Refrigerators, D. Eddy & Son..... 7,102 Whisky, J. S. Finch & Co..... 7,098

DESIGNS.

Burial caskets, M. H. Crane..... 11,070 Carpet, H. Horan..... 11,060 to 11,062 Carpet pattern, A. Heald..... 11,063 Funeral ornament, C. H. Learned..... 11,064 Handkerchief, A. Tilt..... 11,068 Heating stoves, H. A. Wood..... 11,073 Ornamental chain links, D. S. Spaulding..... 11,071 Pencil cases, G. S. Clark..... 11,069 Pencil cases, C. L. Downes..... 11,025 Show cases, H. R. Brown..... 11,058 Stocking, G. Branson..... 11,059 Wall papers, F. Mencke..... 11,066, 11,067

English Patents Issued to Americans.

From March 11 to March 14, inclusive.

Archery, W. H. Wright et al., Rochester, N. Y. Carding machinery, E. A. Dick, Washington, D. C. Carding machinery, W. C. Bramwell, Hyde Park, Mass. Cooking apparatus, W. Pickhardt, New York city. Electric light, C. F. Brush, Cleveland, Ohio. Fog signal compass, W. Hughes, San Francisco, Cal. Locks, H. Rogers, New Haven, Conn. Meters, liquid, J. F. de Navarro et al., New York city. Pumping engine, G. F. Blake, Boston, Mass. Sewing machine, G. W. Hooper, New York city.