

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated: J. B. B.—Feldspar and hornblende rock.—J. N. B.—It is phlogopite—magnesia, alumina, potash silicate—a variety of mica.—I. H. P.—Sandstone with a little mic—no specular iron.—No name, 6 specimens: Nos. 1 and 2, black jasper; 3, decomposed orthoclase; 4, chert—an impure variety of quartz; 5 and 6, fine quartz conglomerate containing much iron sulphide.—S. R. T.—Principally aluminum and magnesium silicates colored by ferric oxide.

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges with much pleasure the receipt of original papers and contributions on the following subjects: Physical Characteristics of Ether. By W. D. Patent Litigation. By D. V. E. N.

HINTS TO CORRESPONDENTS.

We renew our request that correspondents, in referring to former answers or articles, will be kind enough to name the date of the paper and the page, or the number of the question.

Many of our correspondents make inquiries which cannot properly be answered in these columns. Such inquiries, if signed by initials only, are liable to be cast into the waste basket.

Persons desiring special information which is purely of a personal character, and not of general interest, should remit from \$1 to \$5, according to the subject, as we cannot be expected to spend time and labor to obtain such information without remuneration.

[OFFICIAL.]

INDEX OF INVENTIONS FOR WHICH Letters Patent of the United States were Granted in the Week Ending June 18, 1878, 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.

Table listing various inventions such as Ammonia or ether machine, Apple corer, Auger handle, Awning, Axle arm for vehicle wheels, Back band hook, Bale tie, Bale tie, Basin cover, Basket wire, Bessemer converters, Blind slot adjuster, Boiler for steam fire engines, Boiler tubes, Book binding, Book blank, Book holder, Book support, Boot and shoe lasting apparatus, Boots and shoes, Bosom board, Bottle register, Bottle stopper, Bowling alley, Brake, Brake, Brick and tile machine, Broiling chamber, Buckle, Button fastening, Button hole linings, Can, Can seam or joint, Car coupling, Car stock, Carbureting air, apparatus for, Cards, apparatus for shuffling, Carriage seat, Casks, fish drain for, Celery tops, packing, Chair, Chair, folding, Chair, folding rocking, Chair, invalid, Chair, rocking, Chandelier, extension, Churn, Churn, Churn, Clock, Cloth pressing machine, Clothes drier, Clutch, Cock, gauge, Coffee pot, Coffin fastening, Cooler, Corks in bottles, Cork and grain cleaner, Corn popper, Corpse cooler, Cotton cans, Cotton condenser, Cotton picker, Cow fetter, Cradle, Cultivator, Curtain fixture, Dishes, device for greasing baking, Ditching machine, Drain, waste, and sewer pipe trap, Drawing roll saddle, Dress shield, Drill, hand, Drilling oil and other wells, rig for, Egg carrier, Embroidery pattern, Engine, rotary steam, Fabrics, cleaning and bleaching, Fan, automatic, Fare box, Faucet attachment to casks, Feed bag, Feed gauge.

Table listing various inventions such as Feed water heater, Fence, portable, Fence post, Fence post, Fish curing, Fluting and saddle holder, Forks, manufacture of, Freezing apparatus, Fruit huller, Furnace, Austin & Horsford, Furnace for heating soldering irons, Furnaces, device for feeding air to, Furniture pad, Gas controlling apparatus, Gas lighting apparatus, Gate, Globe and reflector for burners, Governor, Thompson & Hunt, Governor, engine, R. Hooper, Grain binder, Grain binder, Grain drier, Grain separator, Grain separator, Grain separator, Grating tool, Grate extension, Gun, magazine, A. Burgess, Gun, magazine, G. M. Marks, Harvester, C. Colahan, Harvester cutting apparatus, Hat fastener, Hat finishing machine, Hat pouncing machine, Hat pouncing machine, Hats and caps from straw, Head elevator and chain raiser, Heater, C. Weeke, Heater, steam water, Heddle frames, screw heddle eye, Hens' nest house, Hinge for awning blinds, Hinge, lock, N. H. Camp, Hinge, lock, B. Lent, Hog cholera compound, Hog cholera compound, Hog scald and feed steamer, Hoof moistener holder, Hopper, W. S. Mead, Horse boot, Horse power, Horses, stopping runaway, Horseshoe, F. H. Hall, Hub, vehicle wheel, Hydrocarbons, burning, Hydrotherapeutic apparatus, Indicator for freight cars, Indicator for letter boxes, Knife sharpener, Lock, sash, W. M. Griscom, Log slide, Log turner, Lubricating compound, Lubricator, H. Alton, Mask, G. W. Howland, Mattress filling, Motion, device for converting, Musical instrument, mechanical, Musical instruments, key board for, Musical transposing board, Mustard pot and spoon, Nipping and clinching tool, Nozzle, C. E. Clark, Nut lock, Ore jig, Organs, blow pedal for, Packing, piston, W. P. Woodruff, Painting wire cloth, apparatus for, Pan, bake, C. Jackson, Paper bag, Paper bag machine, Photographic printing frame, Piano stringing device, Pin, clothes, M. Warren, Pin, safety, Pipe coupling, Pipe coupling, G. Westinghouse, Jr. (r), Planter, seed, Tyler & Baskin, Planter, seed, J. C. Barlow, Planter, corn, J. Laue, Planter, seed, A. J. West, Plow, J. Lane, Plow and attachment, turning, Plow, sulky, F. M. Foster, Plow, sulky, G. W. Wright, Plow, vineyard, M. Ross, Potato slicer, Press, baling, H. D. Coleman, Press, butter, N. S. Long, Press, cigar packer, Press, water from starch, Press, hay and cotton, Press, wool, W. Tipton, Printing presses, inker for, Propeller, screw, M. Chase, Pulley, belt shifting, Pulverizer, soil, M. McCollm, Pulverizing apparatus, H. Bolthoff, Pump, Duwelius & Crivel, Pump, double acting, Pump, double action, Pump, submerged, Rails, rerolling old, Glaze & Westwater, Railway frog, L. H. North, Rake and baling press, Rattan worker, Rein holder, harness, Taylor & Mackay, Reservoir and stove shelf, Ripper and cutter, combined, C. Bean, Rolling mill, metal, W. R. Jenkins, Jr., Roof covering and sheathing, Roofing, L. Peirce, Roofing, saturated sheathing, Saddle, harness, S. Magnus, Saddle, riding, Saddle, riding, A. D. Jones, Safe, calorific, A. T. Snyder, Sample reel, A. L. Snyder, Sash fastener, Sash holder, Sash, window, Saw frame, bracket, Spring & Robinson, Saw mill head block, Saw teeth, Scales, weighing, Scarf fastening, Screw swaging machine, Seam for metal ware, Sewing machine driver, Sewing machine fly wheel, Sewing machine, S. M. Richardson, Shoe protector, Shoe or gaiter, Shovel, Siphon, Sled, Sled propeller, Sleigh, Soap frame, Sower, seed, Spittoon, Spring fastening, Spring, vehicle, Stamps, stamping cigars with, Steam trap, Still column, Stopper sleeve, Stove damper, Stove grate, Stove oil, Stove pipe shelf, Surgical tube, india rubber, Suspension hook, Syringe, S. Peters, Table, extension, Tellurian, Testing machine, Thill coupling, Torpedo for oil wells, Toy, J. H. Hawes, Toy pistol, Truss, Deveron & Lackman, Valve, steam, Stringer & Francis, Vehicle top, Vehicle top adjuster, Vehicles, jump seat for, Ventilator and chimney top, Wagon cover, Wardrobe, M. Doyle, Wash board, Washer and wringer, Washer, atmospheric clothes, Washing machine, Washing machine, Washer for piece goods, Water closet, Water wheel, turbine, Well, petroleum, Wells, casing spear for oil, Wheel, vehicle, C. O. Wilder, Whiffetree hook, Whiffetree hook, N. M. Bowen, Whiffetree hook, W. S. Mead, Whiffetree hook, E. E. Morse, Whip, leather, E. B. Light, Wire barbing machine, Wire cutter, Wire cutting machine, Wire cutting tool, Wrench, pipe, Yokes, clip for neck.

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