

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—not 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 Jufe 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 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, Car, Carbureting air, apparatus for, Cards, apparatus for shuffling, Carriage seat, Casks, fish drain for, Celery tops, Chair, Chair, Chair, Chair, Chair, Chandelier, Churn, Churn, Clock, Cloth pressing machine, Clothes drier, Clutch, Cock, 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 inventions such as Feed water heater, Fence, portable, Fence post, Fence post, Fence post, Fence wire, Fences, barb for wire, Fiber cleaning machine, Fibers, sep. animal from veget., Finger nail trimmer, Fire arm, magazine, Fire in oil tanks, 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, A. Lee, Globe and reflector for burners, Governor, Thompson & Hunt, Governor, engine, R. Hooper, Grain binder, L. Erpelting, Grain binder, A. G. McIntosh, Grain drier, R. H. Tiernan, Grain separator, W. N. Esselstyn, Grain separator, S. Stone, Grain separator, I. Turman, Grain tool, E. H. Huffman, Grate extension, O. G. Parr, Gun, magazine, A. Burgess, Hame fastener, G. M. Marks, Harvester, C. Colahan, Harvester cutting apparatus, Hat fastener, F. L. Tripp, 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, D. Jr. & A. Gundelinger, Knob attachment, A. Dickerman, Knob attachment, E. St. John, Ladder, fire escape, S. Davis, Ladder, fire escape, D. E. Gibbons, Ladder truss, adjustable, G. H. Fox, Lamp burner, argand, H. Preise, Lamp, electric, Sawyer & Man, Lap link, M. Howard, Last pulling machine, C. C. Johnson, Latch, F. W. Brocksieper, Lifting jack, V. H. 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