

(27) R. H. S. asks: 1. How can I dissolve common beeswax so as to mix with hot water? A. Wax is soluble in oil of turpentine, benzole, etc. An emulsion may be obtained by violently agitating these solutions with hot water.

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

W. E. H.—1 and 4 Quartzose rock, probably auriferous. 2. Galena carries a little silver. 3. Iron pyrites.—O. M. S., R. C., M. T. H. W., and H. S.—Your minerals have not yet come to hand.—J. T.—Limestone containing iron pyrites of no value.—J. A. T.—It is celestite—strontium sulphate.—S. T.—1. An impure fluor-spar. 2. Gypsum—lime sulphate.—A. L. B.—It is beryl—3BeO, Al<sub>2</sub>O<sub>3</sub>, 4SiO<sub>2</sub>.—E. B. B.—Biotite (hexagonal mica).—G. S. McC.—1. Calcite—lime carbonate. 2. Dolomite—magnesian limestone.—3. Mica schist. 4. Zinc blende—sulphide of zinc and iron.—S. W. W.—1. Not corundum but magnetite—a valuable iron ore. 2. Impure pyrolusite—oxide of manganese.—A. St. J., Jr.—Galena (lead sulphide) with chalcocite in quartzose; probably carries a small quantity of silver. We have several samples of minerals, etc., bearing no mark by which we can identify their senders.

COMMUNICATIONS RECEIVED.

On Conservation of Energy. By H. S. B. The Bell Telephone Considered as an Induction Coil. The Chemistry of Electricity. By W. H. G. On Experiments in Magnetism. By E. P. T. On Caving in Mines. By D. E. H.

[OFFICIAL.]

INDEX OF INVENTIONS

FOR WHICH

Letters Patent of the United States were Granted in the Week Ending

June 29, 1880.

AND EACH BEARING THAT DATE. [Those marked (r) are reissued patents.]

A printed copy of the specification and drawing of any patent in the annexed list, also of any patent issued since 1866, 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. We also furnish copies of patents granted prior to 1866; but at increased cost, as the specifications not being printed, must be copied by hand.

Table listing various inventions with their respective patent numbers, such as Aging liquors, Air compressor, Air purifying apparatus, Amalgamator, Artist's board, Axle carriage, Baby carrier, Bag for packing, Baking device, Bale tie wire, Barrel swing, Reach seat, Bed camp, Bed rest, Bed spring, Bedstead, Beehive, Belt fastening, Belt for harvesters, Bolts, Boring, Bosom board, Bracelet, Car coupling, Car coupling, Car coupling, Car coupling, Car door, Cars, Carbueter, Carpet sweeper, Carpet tacker, Carriage top joint, Cartridge loading implement, Caster furniture, Casting metal, Casting printing rolls, Celluloid, Check rower, Churn dasher, Churn power gearing, Cloth finishing machine, Cloth instrument for turning edges, Coal box and fire iron holder, Coffee pots, Colter, Copy holder, Cooking vessel, Cot, Crochet needle, Cuff supporter, Cultivator, Dentist's and barber's chair.

Table listing various inventions with their respective patent numbers, such as Diagram sheet, Dish washer, Door, Dwelling house, Egg beater, Elbow joint, Electric lights, Electric switch, Elevator bucket, Fabric, Fan, Fan, Fan, Faucet, Feather renovator, Fence, Fence brace, Fence post and gate hinge, Fertilizer dropper, Fibers, Filter, Firearm, Firearm sight, Fire extinguisher, Fish, Fruit and lard press, Fruit crusher, Furnace grate, Gas burner, Gas generator, Gas process and apparatus, Gas process and apparatus, Gas production, Gas regulating burner, Gate, Gilding process, Glass cutter, Glass plate cleaner, Glove, Grain, Grain binder, Grinding machine, Grub and stump puller, Gun lock, Handle for satchels, Harness hook, Harrow, Harrow rotary, Harrow rotary and drag, Harvester, Harvester rake, Harvester sickle bar, Hat, Hatch closer, Hay loader, Hay rake, Hay rickling and loading device, Heel trimming machine, Horse power for gins, Hub attaching device, Ink well, Insect destroying apparatus, Insect destroying apparatus, Knitting machine, Knitting machine for manufacturing fabrics for mattresses, Lacing hook, Ladder, Lamp, Lamp miner, Lantern, Latch, Lifting jack, Liquid cooler, Locomotive chair, Loom, Loom shuttle operating mechanism, Magneto-electric machines, Mail bag, Marking and slitting gauge, Measure, Measures, Meat, Mechanical movement, Milk cooler, Milk cooler, Milk cooling apparatus, Music chart, Music leaf turner, Music stand, Musical instruments, Nailing machine, Necktie, Necklace fastening, Nickel depositing solution, Oils to buildings, Open hearth furnace, Ore concentrating pan, Ore crusher and pulverizer, Ore washer, Ores, Organ, Organ valves, Padlock, Paper composition, Paper, Paper converting straw into bleached, Paper folding machine, Paper hanger's table, Paper, Paper pulp, Paper pulp, Paper tubes, Parer, Pattern plates, Pen, Pen, Pen, Petroleum, Photo-negative plates, Piano and organ indicator, Pile driver, Plating machine, Planter, Planter, Planters, Plicating fabrics, Plow, Plow, Plow, Plow, Potassium sulphate, Precious stones, Printing machine, Printing press reversing mechanism, Printing surfaces, Propeller, Pump rod adjuster, Railway rail, Railway signal, Railway signal, Railway tracks, Razor strop, Refrigerator, Rendering fat, Rivet or eyelet setting machine, Rock drill, Rowlock, Sash fastening, Saw, Seeding machine, Sewing machine, Shank making machine, Sheet metal strips, Shell, Shingle sawing machine, Shipping can, Shirts, Shoe, Shoe box indicator, Shoe nail, Shoe nails, Sifter, Skirt supporter, Snow, Soda from spent liquors, Soda water, Speed indicator, Spinners' staples, Square, Stamp, Steam boiler, Steam machinery lubricator, Stereotype plate holder, Stocking, Stove pipe joint fastener, Stoves, Street sweeper, Sun shade, Swing, Tape, Tea kettle, Telegraph conductors, Telegraph relay, Telephone call register, Telephone call register, Telephone circuit switch, Telephone lines, Telephone systems, Telephone transmitting, Thill coupling, Thill coupling, Thill support, Tobacco, Tray, Trimming or edging, Truck, Type writers, Umbrella support, Urinal mat, Valve, Vapor burner, Vehicle running gear, Vehicle running gear, Vehicle spring, Velociped, Vise, Waftle iron, Wagon jack, Washing machine, Washing machine, Water closet bowls, Wells, Whiffletree, Wire stretcher, Wrench, Zinc or white lead fumer.

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