

NEW BOOKS AND PUBLICATIONS.

DIE ELEKTRISCHE KRAFTUBERTRAGUNG (THE TRANSMISSION OF POWER BY ELECTRICITY). Edward Japing. Wien, Pest, Leipzig: A. Hartleben, 1883. 236 pages.

Various means have been devised for transmitting power, and the last is by the use of electricity. Mr. Eduard Japing has published a very interesting work, which is now before us, on the above subject.

THE WATCHMAKER'S HAND BOOK. By Claudius Saunier. Translated and enlarged by Julien Trippin and Edward Rigg, M.A. Illustrated by wood cuts and copper plates. Published by Julius Trippin, and by A. Fischer, London.

This handy sized volume contains much that may be useful to watch workers in the metals besides those engaged in watch making.

Notes & Queries

HINTS TO CORRESPONDENTS.

No attention will be paid to communications unless accompanied with the full name and address of the writer.

Names and addresses of correspondents will not be given to inquirers.

When we 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.

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.

Any numbers of the SCIENTIFIC AMERICAN SUPPLEMENT referred to in these columns may be had at the office. Price 10 cents each.

Correspondents sending samples of minerals, etc., for examination, should be careful to distinctly mark or label their specimens so as to avoid error in their identification.

(1) O. W. R. asks: What would be the weight of a body on the surface of the sun as compared with its weight on the surface of the earth? Scientists seem to vary largely in their estimates.

the sun's surfaces would weigh 27.9 times more than at the earth's surface, under the same conditions. But a body that is solid at the surface of the earth would be vaporized by the intense heat at the sun's surface, and its condition in regard to gravitating influence might be materially changed.

(2) E. P.—The following is recommended as a good mullage for labels: Marcerate 5 parts of good glue in 18 to 20 parts of water for a day, and to the liquid add 9 parts of rock candy and 3 parts of gum arabic.

(3) J. M. B. writes: There is a difference of opinion here as to the power of two engines. One marine engine, 6 inches in its diameter, 6 inches stroke; one marine engine 6 1/2 inches in its diameter, 8 inches stroke, 100 pounds steam.

(4) M. S. R. writes: Having an old Gregorian telescope, the brass tube of which is a little over 5 inches in diameter, that in its present state is of no use whatever, I would be glad if you could inform me in your Notes and Queries: 1. What should be the focal length of the plano-convex objective 5 inches diameter, in order to make a cheap achromatic telescope on the dialytic principle of about 5 feet focal length when finished?

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

July 24, 1883,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing inventions and their patent numbers, including items like Amalgamator, Annunciator and fire alarm, Anvil, Asbestos and articles or goods made therefrom, Ashes, device for arresting dust from, Graham, etc.

Table listing inventions and their patent numbers, including items like Corset, Corset clasp, Corset stay plate, Cotton separator and cleaner, Coupling, Cradle, Creamer, Crimping forms, Crushing and grinding machine, Cultivator and seed planter, Cultivator, sulky, Cut-off valve, Cutter, Damper regulator, indicator, and lock, Desiccating machine, Dies, etc., Disinfecting candle, Drawers, Dredging apparatus, Dredging machine, Drier, Drill, Driving bit, Educational apparatus, Egg carrier, Electric call apparatus, Electric circuits, automatic cut-out for, Electric light regulator, Electric machine, dynamo, Electric machine, dynamo and magnet, Electric switch, automatic, Electrical conductors, system of laying subterranean, W. R. Patterson, Elevator, Elevator buckets to belts, attaching, End gate, wagon, Frazee & Culver, Engine, See Rotary engine, Steam engine, Traction engine, Evaporator, Excavator and wrecker combined, Feeding device, salt, Feeding machine, automatic, Feed gate, automatic, Feed water heater and purifier, Feeder, boiler, Knowlton & Sage, Fence post, metallic, Fence posts, machine for driving, Fertilizer, process of and apparatus for manufacturing, Filing the teeth of rotary cutters, machine for, Fire alarm and call bell system, Fire arm, Frank, Firearms, recoil cushion for, Fire escape, Fire kindling substances, press for moulding, Fishing reel, Flood gate, Flood gate, A. L. Stout, Floor clamp, Flower pot for artificial flowers, Frame, See Quilting frame, Slate frame, Window screen frame, Fruit bleacher, Fruit press, Furnace, Furgament, W. Keller, Furnace, See Glass furnace, Ore roasting furnace, Furnace for manufacturing iron and steel, Henderson, Gas producer, Gate, See Automatic gate, End gate, Feed gate, Flood gate, Sliding gate, Gate, J. Zook, Gear cutting machine, Gear wheels, machine for cutting teeth of metallic, Generator, See Steam generator, Glass furnace, E. Jones, Glasspress, W. M. Wallace, Glassware, J. Locke, Glove fastener, D. T. Chambers, Grain separator and grader, Grain drier, Grate and lining, C. T. Barnes, Grinding mill, Grinding mill, E. H. & C. Morgan, Grinding mill, F. Wilson, Guard, See Keyhole guard, Saw guard, Hair rooster, knitter, and hackle, Hammer and box opening and scraping device, combined, Handle, See Basket handle, Handle hooks, machine for forming tub, Harness, E. P. Thornton, Harness breast chain, W. Rudolph, Sr., Harrow, A. C. Evans, Harvester cutter, Harvesting machine, grain, Hay elevator and carrier, Hay press, portable, Hay rake, Hay stacker, Headlight, locomotive, Heel trimming machine, Hinge, D. McCurdy, Hoe, spring, J. S. Heath, Holder, See Copy holder, Necktie holder, Photographic plate holder, Hone, knife, T. Williams, Hook, See Tughook, Hook for bats, Hoop dressing machine, Horse detector, C. T. Jones, Horse detector, O. J. Spindle, Horseshoe, Hydraulic elevator, Ice cream, etc., non-heat conducting package for, Ice cutter and harvester, Ice harvester, Ice shaving machine, Indicator, See Temperature indicator, Station indicator, Inlaid metal work for jewelry, etc., Insulated electric conductor, Insulated electric conductors, manufacture of, Insulating compound for electrical conductors and apparatus for compounding and applying the same, Iron high in carbon and low in silicon, manufacture of cast, Iron, treating, G. Neilson, Ivory, method of and apparatus for bleaching, J. Miller, Jack, See Last jack, Joint, See Universal joint, Joint fastener, R. W. Ferguson, Kettle, lamp, W. Pountney, Keyhole guard, J. P. Wilkinson, Key seat milling machine, Buchbinder & Vogt, Knife cleaning machine, W. H. D. Jones, Knob attachment, J. Kirby, Jr., Ladder, adjustable, N. Coons, Ladder, extension, C. Frizell, Ladder, extension, J. Spangler, Lamp, W. L. Ewing, Lamp, W. Newman, Lamp burner, W. W. Eastman, Lamp, electric arc, N. S. Keith, Lamp, electric arc, J. Lea, Lamp fixture, extension, Parker & Griswold, Lamp lid, miner's, Deeds & Mack, Lamp, night, T. Bergmann, Lantern, A. J. Sawyer et al., Last jack, G. M. Wells, Leather skiving machine, W. W. Currier, Leather washer, T. Gingras, Lemonade shaker, W. M. Reed, Life-preserver, E. Bauer, Life-raft, E. A. Hayes, Light, See Headlight, Lightning arrester for electric wires, W. R. Paterson, Lock, See Seal lock, Lock, J. S. Aydelott, Lock, F. W. Mix, Locket, C. R. Harris, Locomotive ash pan, C. F. Smith, Lubricator, J. Kelly, Mailing packet, C. H. Leonard, Match boxes, machine for making, Beecher & Elliott, Match splint machine, G. H. Millen, Matches, frame for dipping, G. H. Millen, Matches from the dipping frame, etc., machine for transferring, G. H. Millen, Measuring machine, skin, C. G. Winter, Mechanical movement, J. Cochran, Jr., Mechanical movement, Crompton & Wyman, Mechanical movement, Parsons & Borchardt, Mechanical movement, O. F. Stedman, Metal boxes machine for manufacturing, Dauché & Deniaud, Mill, See Grinding mill, Rolling mill, Moulding machine, H. Reynolds, Mortising machine, H. Feyh, Motive power, Seebach & Betschen, Motor, See Rotary motor, Motor, J. R. Ford, Mowing and reaping machine, L. M. Hawes, Musical instrument key board, M. H. McChesney, Musical instruments, mechanical key board attachment for, W. Thorpe, Necktie holder, D. E. Ladd, Needle blanks, machine for feeding, J. Berry, Oar and oar lock, S. S. Hazeland, Ordnance, breech-loading, T. Nordenfelt, Ore reducing and separating machine, C. E. Moore, Ore roasting furnace, J. M. Thompson, Pantaloon garment, C. C. Pearson, Paper feeding machine, sheet, R. J. Stuart, Pawl and ratchet mechanism, J. Braun, Pen, stenographic, J. McKenzie, Pen support and hand rest, L. D. Heller, Pens, apparatus for supply of ink to, Hughes & Carwardine, Perambulator, 'I. F. Simmons, Perambulators, canopy top for, Eichling & Fitch, Photographic plate holder, E. L. Bergstresser, Pianos, stringing, J. P. Richardson, Picture exhibitor, revolving, A. Nelson, Pill coating machine, G. F. Chappell, Planter check row attachment, corn, Runstadler & Marlay, Planter check row attachment, seed, C. P. Parker, Planter, carb, D. S. Davis, Planter, corn, A. C. Evans, Planter, seed, N. Evinger, Plow jointer, D. Woodward, Poke, animal, J. E. Hunter, Post, See Fence post, Pot, See Flower pot, Power, See Motive power, Press, See Baling press, Fruit press, Glass press, Hay press, Printing press gripper mechanism, J. T. Hawkins, Propeller for steam vessels, M. S. Nelson, Pulley, W. F. Boyson, Pulley, W. H. Carruthers, Pump, W. H. & C. A. Holcombe, Punch ticket, W. H. Campbell, Quilting frame, R. B. Bledsoe, Quilting machine, L. Schultz, Quoit, H. F. Mann, Radiator, T. McAvity, Jr., Railway electric, F. B. Crocker et al., Railway pneumatic switch and electric indicator, C. A. Cooper, Railway tie, A. R. Spaulding, Railway traction, W. B. Reaney, Rake, See Hay rake, Ram, hydraulic, G. Yellott, Recumbent chair, E. E. Peck, Reel, See Fishing reel, Refrigerating apparatus, J. Reid, Refrigerator and beer cooler, M. Hohl, Regulator, See Damper regulator, Electric light regulator, Road making machine, F. M. Moulton, Rock drill, W. H. Randall, Rock drilling machine, Parsons & Borchardt, Rock drilling machine, hand, Parsons & Borchardt, Rolling mill, A. Crandell, Rotary engine, O. H. Robinson, Rotary motor, A. Klossam, Rubber waste separating foreign substances from, India, A. W. Kent, Sash fastener, M. Judd, Sash fastener, McCloskey & Coleman, Sash fastener, A. Montant, Saw frame, buck, W. Clemons, Saw guard, T. P. Heinemann, Sawmill head block, H. R. Barnhurst, Sawmill head block facing, A. F. Griswold, Scale, weighing, W. G. Collier, Scraper, ditch and road, J. W. Hedges et al., Scraper, sulky, P. Englehart, Screw, wood, I. F. Brown, Seal, car, F. G. Gilmore, Seal lock, W. H. Williams, Seed huller, cotton, P. McDermott, Separator, See Cotton separator.