

THE WILDERNESS CURE. By Marc Cook. New York: William Wood & Co.

The curative value of out-door life in the Adirondacks in incipient consumption of the lungs was demonstrated in the writer's case twenty-five years before Mr. Cook set up "Camp Lou." Taken soon enough by one who thoroughly enjoys wood ranging, the wilderness cure is very likely to be a sure cure. But to the vast majority of consumptives the wilderness is the worst possible resort. All the advantages attending tent life in the wilderness—and they are many—can usually be secured within an hour's ride of home, often within a stone's throw, with none of the risks or discomforts entailed by banishment from home and civilization.

SCIENTIFIC INDUSTRIES EXPLAINED. By Alexander Watts. Edinburgh and London: W. & A. K. Johnston. 12mo, pp. 203. 2s. 6d.

It is hard to estimate the utility of a book like this. The descriptions given of the more important applications of science to manufactures are correct, and clear enough to such as are fairly well versed in chemistry. But they are too brief to satisfy such readers, while to the unscientific the style is too technical on the whole to be easily intelligible. Still it may prove a handy reference book to those of liberal education, so-called, whose studies have not embraced much of industrial chemistry and whose library is small.

MECHANICAL ENGINEERING. By Francis Campin, C.E. London: Crosby, Lockwood & Co. 2s. 6d.

No. 223 of Weale's Rudimentary Series; substantially an abridgment of Mr. Campin's large treatise on practical engineering, with some additions and substitutions of recent matter.

THE GAS AND WATER COMPANIES' DIRECTORY, 1881. Edited by Charles W. Hastings, London.

This, the fifth issue of the directory, shows a great improvement in form, and the editor thinks also in fullness and accuracy. It furnishes classified lists of the gas companies of England, Scotland, Wales, and Ireland, and the more important companies of Europe, Asia, and Australia, with statements of capital, officers, etc., etc. The water companies of Great Britain are similarly represented.

GAS WORKS STATISTICS, 1881. London: Charles W. Hastings.

The third annual issue of Mr. Hastings' useful compendium of British gas works statistics. Returns are given from 726 towns, showing tons of coal carbonized, make of gas, illuminating power of gas, price per thousand feet, price paid for public lamps, dividends, etc.

PAPERS READ BEFORE THE PI ETA SOCIETY, RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y. Vol. II. No. 2. 1881.

The papers for this issue comprise: The Camber of Bridges, Thos. M. Cleemann, C.E.; the Interoceanic Canal, W. E. Danel, C.E.; Bridge Lines, their Sizes and Bearings, J. A. L. Wadell, C.E.; Rational Fractions, Adolfo E. Besora, C.E.; Note on Gordon's Formula for Long Columns, W. H. Burr, C.E.; The Size of the Angle Block in a Howe Truss Bridge, by Thos. M. Cleemann, C.E.; Discussion of Paper on Braced Iron Piers, by W. H. Burr, C.E.

PAPERS OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA AMERICAN SERIES, II. By A. F. Bandelier. Boston: A. Williams & Co. 8vo, pp. 133.

The initial publication of the American series embraces two papers: 1. Historical introduction to studies among the sedentary Indians of New Mexico; 2. Report on the ruins of the Pueblo of Pecos. In the first paper Mr. Bandelier gives a critical review of the historical references to the seven cities, caves, or ravines, and their inhabitants; and in the second he recounts his observations among the aboriginal ruins in the valley of the Pecos. He does not attach to the Montezuma tale any historical importance whatever—not even a traditional value.

HAND BOOK OF PRACTICAL LANDSCAPE GARDENING. By F. R. Elliott. Rochester: D. M. Dewey. 8vo, cloth, pp. 96.

A second and improved edition of Mr. Elliott's practical hand book. A brief chapter on the principles of landscape gardening and the treatment of ornamental plants is followed by condensed descriptions of the principal trees and shrubs available for decorative purposes, shades, hedges, screens, etc. Then are given a dozen or more designs for lots and grounds, from a city lot in size to a 40 acre plot, each plan being drawn to scale, with specific directions for the planting of each tree and shrub. Several colored illustrations of trees and flowers serve to embellish the book, which can hardly fail to be useful to householders of moderate means who wish to make the most of their opportunities.

MODERN ARCHITECTURAL DESIGNS AND DETAILS. In ten parts. New York: William T. Comstock. \$1 a part.

The tenth and concluding part of this compilation of architectural details suited to popular styles of house building of the less expensive sort, contains views, plans, and details of a handsome brick and frame cottage, the same for a dwelling in the Elizabethan style, and a number of ornamental designs for ventilating registers, chimney tops, and so on. The entire series comprises nearly 700 details, drawn to a large scale, as are all the plans and elevations. The work cannot fail to be suggestive and useful to all builders of suburban and country dwellings.

MODERN ARCHITECTURAL DESIGNS AND DETAILS. New York: William Comstock. Folio. \$1.

Part 9 of this useful series includes plates 65 to 72, and contains perspective views, elevations, and plans of several artistic country houses, one with Eastlake features, each accompanied by a multitude of details.

[OFFICIAL.]

INDEX OF INVENTIONS

FOR WHICH

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

June 28, 1881,

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 inventions with patent numbers, including: Air brake apparatus, G. Westinghouse, Jr.; Alphabet blocks, nested, J. A. Crandall; Amalgamator, A. V. Trust; Animal power, N. Potter; Atomizer for hydrocarbons, W. W. Thomas; Auger, earth, E. A. Smith; Automatic gate, W. H. Tupper; Axle and box, vehicle, J. C. Jenkins; Axle box, car, W. G. Raoul; Axle gauge, W. W. Willis; Axle lubricator, F. A. De Bremon; Axles, manufacture of car, J. Smith; Bag fastener, C. E. Brown; Balance with tare device, spring, Fray & Pigg; Ball trap, G. N. Sidney; Barrel, knockdown return, Olmsted & Huffman; Bath tub, portable, L. I. Jones; Bearings, making chilled ball, P. W. Gates; Bed bottom, spring, Blumenstein & Waldsmith; Bed bottom, spring, C. A. Le Quesne; Bed lounge, J. B. Marnee; Bed lounge, T. Soden; Belt clasp, W. M. Whiting; Berth lock for sleeping cars, J. L. & C. P. Howard; Binder, temporary, J. F. Tapley; Blasting and blasting cartridge, S. R. Divine; Blowpipe, T. T. Morrell; Boot and shoe crimping form, H. R. Adams; Boot or shoe, M. Leventritt; Boots and shoes, manufacture of, M. Leventritt; Bottle, W. T. Goldsmith; Bottle washer, L. Wagner; Bottles having internal stoppers, apparatus to be used in stoppering, J. Varley; Bracelet fastening, A. Seauert; Brake beam, G. Westinghouse, Jr.; Brick machine, G. Carnell; Brick mould, G. Carnell; Broom holder, D. H. Phipps; Brush machine, J. H. Dodds; Buckle, A. B. Wilhelm; Button, O. Ericsson; Button, C. D. Hunt; Candles, manufacturing fatty acids for making, A. M. Jacobs; Cape, etc., process of and apparatus for extracting juice from sugar, G. A. Bazé; Car coupling, N. Barr; Car coupling, T. Farrell; Car coupling, W. A. Lovelace; Car coupling, I. S. McGlehan; Car coupling, J. W. Page; Car coupling, Thomas & Cowdery; Car coupling, F. P. Wance; Car, stock, J. C. Jones; Car wheel, B. H. Reville; Cars, device for unloading, G. P. Merrill; Cars, iron platform for railway, W. A. Cushman; Card and box, sample, C. D. Williams; Carding machines, mechanism for operating doffer combs of, H. & H. A. Stone; Carpet and oil cloth fastener, J. A. Cole; Carpet sweeper, M. R. Bissell; Carriage, E. Delessert; Carriage jump seat, G. H. Hutton; Cartridge belt, G. Crouch; Cash carrier, automatic, W. S. Lamson; Catheter, E. Pfarre; Cattle, shield for, J. Stemmons; Chair for attaching to door steps, E. E. Porter; Chuck for holding watch bezels, S. I. Snyder; Churn, H. F. Batcheller; Churn, J. A. Werner; Churn motor, Akins & Elmore; Coffee roaster, G. A. Beidler; Coffin dam, J. R. Moffitt; Collar and hame, combined horse, J. Knowles; Collar for live stock, J. R. Speer; Combing machine, A. Smith; Compass, mariner's and azimuth, J. Readman; Coop, poultry, E. Rutz; Copper ores containing precious metals, treating, P. G. L. G. Designolle; Core boxes and flasks, jarring block for, S. J. Adams; Corset, E. K. Bullock; Corset, A. B. Curtis; Cotton gin condenser, W. W. Thrasher; Cotton picker, D. B. Haselton; Cotton stalk cutter, A. B. Pearce; Crucible and pottery mould, Driscoll & Atwood; Cultivator, H. W. Chamberlain; Curtain fixture, J. Shorey; Curtain ring, T. Hipwell; Dairy vat, Burrell & Freeman; Dental articulator, H. L. Cruttenden; Dish cleaner and drainer, S. B. Luckett; Ditching machine, S. C. Robinson; Door hanger, G. R. Kidder; Door hanger, H. M. Landers; Door spring, J. T. Rush; Dredge, vacuum, J. F. Sanders; Dredge winder, J. S. Stuart; Easel, picture, A. Shedlock; Edge setting and heel burnishing machine, W. F. Hutchinson; Electric machines, switch for dynamo, H. J. Muller; Elevator stop, automatic, G. F. Hammer; Explosive compound, S. R. Divine;

Table listing inventions with patent numbers, including: Feed gearing for machine tools, Sellers & Bancroft; Fence, portable, J. Shallenberger; Fiber or paper pulp, reducing wood to fine, G. H. Pond; File, corn, M. Wilson; File paper, J. A. Welch; Filing machine, endless belt, D. H. Stephens; Fire extinguisher, H. S. Parmelee; Fish and game trap, Rentz & Herzog; Fishing reel, G. Hancock; Flue scraper, boiler, J. L. Kelley; Fork and rake, combination, G. S. Latta; Furnace, J. G. McAuley; Galvanic appliance, C. J. Heylmann; Galvanic battery, J. H. Cheever; Game board, M. L. Henry; Gate, J. Geib; Gate, Myers & Frank; Gate, W. F. Rice; Glass globes, etc., decorative cutting of polished, J. B. King; Glucose from grain, manufacturing, Williams & Alberger; Glue, apparatus for the manufacture of, H. H. & W. A. Baeder; Grain drier, steam, H. Cutler; Grain and finishing wood, composition for, A. Wells; Grappling bucket, F. Imhorst; Grate, G. T. Ayer; Gun stock, Hape & Oliver; Gymnastium, vaulting horse or buck for, F. Medart; Hame fastener, E. Bouchey; Hammer, combination, J. Straszer; Harness, J. Truxal; Harness attachment, D. D. Baton; Barnes slide loop, J. Hudson; Harrow, sulky, I. H. & S. Reiner; Harvester, R. Dutton; Harvester dropper, K. Anunsen; Hatch door, elevator, Eames & Stever; Hay carrier, L. Y. Myers; Hay fork, horse, J. H. Lux; Hay loader, Whitcomb & Wager; Heat alarm, J. Curran; Heat conducting vessel, H. L. Palmer; Holdback, A. H. Thomas; Honeycomb carrier, J. M. Davis; Honey frame, sectional, J. Forncrook; Hoops, vat for heating and saturating barrel, D. H. Burrell; Horseshoeing bench, J. Sykes; Horseshoes, machine for making, O. J. & S. Farmer; Hose clamping machine, J. F. Mallinckrodt; Hose, machine for inserting goose necks and couplings into flexible, J. F. Mallinckrodt; Hub band and protector, combined, C. Boseker; Hydraulic elevator, W. H. Milliken; Hydraulic elevator, S. E. Stokes; Hydrocarbon burning furnace, W. W. Thomas; Infusions, extracts, etc., preparation of vegetable, S. C. Davidson; Injector, steam boiler, J. M. Holt; Ink, indelible, H. Froehling; Ink well, O. Pederson; Iron, manufacture of, C. M. Du Puy; Jute, preparing carbonized, N. Rosenwasser; Kaleidoscope, V. M. Farr; Kettle and boiler, combined process, E. H. Frazier; Lacing stud and button fastener, combined, G. W. Prentice; Lamp support, electric, Sample & Rabl; Lantern, hand, L. Henkle; Lasting jack, G. W. Hutchins; Latch, reversible, H. Pickford; Latch, spring, E. H. Frost; Lighting rod, J. H. Schoonmaker; Locket, G. B. Whitney; Loom shedding mechanism, A. Claus; Lozenge machine, W. Sharp; Mash, machine for stirring and discharging, S. E. Chubbuck; Mechanical movement, L. E. Dickinson; Metal bending machine, H. Duffey; Middlings purifier, C. E. Sage; Milk can, A. O. Peterson; Milk cooling room, A. Copley; Mineral concentrator or dry ore separator, atmospheric, A. P. Granger; Miter box, N. J. Kinch; Mitering machine, W. E. Eastman; Mole trap, J. Klar; Mordant, Turkey-red, A. M. Jacobs; Musical instruments, mechanical, G. W. Turner; Nailing machine, A. Newton; Nailing machine, G. H. Perkins; Nut lock, J. C. Bloom; Oil press mat, J. L. Mistrot; Ordnance, breech-loading, T. Yates; Ore concentrator, R. Parry; Ore roasting furnace, J. B. Randol; Oscillating chair, E. Stout; Packing, piston, R. L. Kester; Packing, piston, M. W. Woodruff; Paddlewheel, W. D. Ewart; Painting on fabrics, oil, A. Gutmann; Paper drying machine, J. S. Piper; Paper pulp, manufacture of articles from, G. W. Laraway; Paper with wax, etc. machine for coating, J. T. Bedford; Pen, stylographic fountain, C. H. Downes; Perfume of natural flowers, and apparatus therefor, obtaining, R. A. Chesebrough; Permutation lock, M. N. Sevier; Photograph burnishing machine, J. P. Bass; Photographic printing and vignetting, L. Gutesunst; Piano action, C. Zibuski; Picker teeth, die for trimming and cutting off, R. Aldrich; Pipe hanger, J. F. Mallinckrodt; Plane, bench, S. A. Piper; Planter and dropper, corn, J. H. Dawson; Planter, corn, W. D. Lindsley; Planter, cotton and corn, J. G. Hanna; Planter, seed, R. J. Galloway; Planter, seed, C. C. Hunter; Plow, P. Kessler; Plow, T. E. Jefferson; Plow, sulky, T. E. Jefferson; Plumbers' traps, device for making, R. Cunningham; Pocket, safety, A. B. Carson; Potato digger, C. King; Press, J. F. Gubbins; Presses, power movement for, G. A. Porter; Pressure brake, fluid, G. Westinghouse, Jr.; Propulsion of ships, hydraulic, S. Stucky; Pulp engine, W. W. D. Jeffers;

Table listing inventions with patent numbers, including: Pulp, machine for moulding barrels, etc., from, G. W. Laraway; Pump, force, M. Crossman; Pump valve, J. H. Dunlap; Punch, ticket, Gunther & Kowalski; Rail fastening, I. K. Bennett; Railway chair, W. D. Howard; Railway signal apparatus, E. Dunlap; Railway train indicator, T. H. Norton; Railways, electric danger alarm for, T. A. B. Putnam; Ratchet and clutch device, H. G. Fiske; Rein, driving, H. G. Sieb; Rivet, F. Ott; Rivet, Q. E. Packard; Rotary engine, T. A. Miller; Rotary engine, W. H. Wigmore; Saw mill, C. A. Hege; Saws, machine for sharpening band, G. W. Amesbury; Sawing machine, portable rail, J. McKinney; Scraper, drag, Cosgrove & Welch; Scraper, earth, J. Hale; Screw and lever and traversing jack, combined, Stevens & Bonner; Seal press bed plate, H. J. Stratemeyer, Jr.; Sewing machine, M. C. Gritzner; Sewing machine table frame and treadle, J. E. Donovan; Shank creasing, coloring, and stamping machine, Mussels & Pray; Shearing device, W. R. Fowler; Shoe back and counter gauge, C. W. Shippee; Shoe nail, A. Newton; Shovel, spade, or scoop, C. T. Bellamy; Siding gauge and bracket, C. Boyd; Solar and transit instrument, J. Gardam; Solar camera, H. A. W. Braune; Soldering cylinder, M. J. Stark; Soldering tweezers, L. H. Sanderson; Spinning machine, etc., E. Denby et al.; Spool exhibiting case, C. E. Gould; Spooled threads, receptacle for, N. Ware; Squares, jointed pitch board for, F. N. Marwick; Stamp, hand, Gates & Pettit; Station indicator, S. B. Crane; Steam boiler, J. F. McEntee; Steering apparatus, steam, A. Lafargue; Stocking, R. M. Appleton; Stone or rock breaker, P. W. Gates; Stove and furnace door frame, D. M. Knowles; Stove, hot air, Goodrich & Johnson; Stove, hydrocarbon gas, A. M. Brainard; Stovepipe, machine for grooving loose jointed, C. F. Beaman; Stoves, etc., draught apparatus for, F. Beaumont, Jr.; Strainer, oil tank, J. Haggerty; Strainer, sink, J. M. Stimpson; Straw burning furnace, J. Walrath; Street sweeping machine, T. Bradley; Sugar, salt, etc., holder and pulverizer for, J. McBride; Suspender end, E. Painter; Tag fastener, T. P. Marston; Telegraph, L. Maiche; Telegraph, duplex, J. M. Stearns, Jr.; Telegraph repeater, duplex, D. R. Downer; Telegraph wires, device for deadening sound vibrations of, P. D. Connor; Telegraphic repeater sounder, C. G. Burke; Telephone stand, revolving, E. F. Weaver; Telephone switch, M. G. Kellogg; Telephone transmitter, S. Tainter; Tire shrinking machine, A. Kiger; Tire upsetter, B. S. Haskell; Tire upsetter, A. A. Still; Tool, combination, J. Straszer; Toy bank, R. E. Turnbull; Toy, climbing, W. C. Farnum; Toy, climbing or traveling, W. C. Farnum; Toy feudal castle, G. H. Ireland; Toy savings bank, H. Clement; Toy vehicle, folding, G. H. Ireland; Trace carrier, M. K. Marvin; Track drilling machine, Gasset & Fisher; Traction engine driving wheel, K. Schaefer; Transom lifter, F. V. Phillips; Truss, I. B. Seeley; Tubes, welding and sizing, S. P. M. Tasker; Tubing coupling, P. Patterson; Turn buckle, G. S. Rominger; Type writers, wood counter for, C. T. Brown; Undergarment, C. A. Brown; Vapor burner, W. H. Russell; Vapors, cooling apparatus for condensing, O. Braun; Vehicle gear, oscillating, H. Duffey; Vehicle spring, C. C. & J. A. Bishop; Vehicle spring, G. Freeman; Vehicle wheel, T. E. Jefferson; Velocipede, A. Vreeland; Ventilating apparatus, J. F. Hoyne; Volute springs, machine for making, O. Bihet; Wagon body iron, B. Burr; Wagon, lumber, Seifer & Maschek; Wagon top, removable, Bower & Wilkinson; Washing machine, J. M. Champe; Washing machine water heater, Bailey & Perrenot; Watch crown, T. Mueller; Water closet bowl, glass, G. E. Hatch; Water meter, W. L. Horne; Water trough and underground drain, J. G. Brown; Water wheel, C. Dilks; Wells, boring, J. H. South; Windmill, O. T. Chamberlain et al.; Windmill, Logan & Kelsey; Wrench, L. Chapman;

DESIGNS.

Table listing designs with numbers, including: Cards, receptacle for business, W. T. Mersereau; Carpet, J. Pegel; Emblematic stand or tripod for use by secret societies, L. Goddu; Spoon or fork handle, S. W. Belk; Toy, E. G. Williams; Type, font of printing, C. E. Hoyer;

TRADE MARKS.

Table listing trade marks with numbers, including: Cigars, cigarettes, and smoking tobacco, Bovee & Adams; Cutlery of all kinds, J. Rodgers & Sons (limited); Lard, lard oil, and neat's foot oil, N. K. Fairbank & Co.; Liquors, spirituous, Luytens Brothers; Watch movements, Elgin Watch Company;